

Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM
 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-53755
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator SILVERBACK OPERATING II, LLC		6. State Oil & Gas Lease No. E101670008
3. Address of Operator 19707 West IH 10, Suite 201 San Antonio, TX 78257		7. Lease Name or Unit Agreement Name GREASEWOOD 5 STATE COM
4. Well Location Unit Letter <u>E</u> : <u>1829'</u> feet from the <u>NORTH</u> line and <u>370'</u> feet from the <u>WEST</u> line Section <u>4</u> Township <u>19S</u> Range <u>25E</u> NMPM County <u>EDDY</u>		8. Well Number 105H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3566'		9. OGRID Number 330968
		10. Pool name or Wildcat PENASCO DRAW, SA-YESO (ASSOC)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
DOWNHOLE COMMINGLE <input type="checkbox"/>	P AND A <input type="checkbox"/>
CLOSED-LOOP SYSTEM <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>
OTHER: <input type="checkbox"/>	OTHER: <input type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Silverback Operating II, LLC. has changed the well number and the target depth of the subject well. SHL has not changed.

The subject well was originally permitted with well number 152H. However, the new well number is now 105H and the MD is now 7879' and TVD at 2224'. Please see the new C-102 plat attached as well as a new directional plan and updated NGMP.

Please note the lease type should be STATE.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Fatma Abdallah TITLE Regulatory Manager DATE 08/25/2023

Type or print name Fatma Abdallah E-mail address: fabdallah@silverbackexp.com PHONE: (210) 585-3316

For State Use Only

APPROVED BY: Ward Rikala TITLE Petroleum Specialist A DATE 9/29/2023

Conditions of Approval (if any):

District I

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III

1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53755	² Pool Code 50270	³ Pool Name PENASCO DRAW, SA-YESO (ASSOC)
⁴ Property Code 333974	⁵ Property Name GREASEWOOD 5 STATE COM	⁶ Well Number 105H
⁷ OGRID No. 330968	⁸ Operator Name SILVERBACK OPERATING II, LLC	⁹ Elevation 3,566'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	4	19-S	25-E		1,829'	NORTH	370'	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	5	19-S	25-E		1,829'	NORTH	100'	WEST	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

SURFACE HOLE LOCATION (SHL)

NAD 83, NM EAST ZONE, U.S. FOOT
X: 490864.85
Y: 615776.33
LAT.: N32.692705
LONG.: W104.497400

FIRST TAKE POINT (FTP)

NAD 83, NM EAST ZONE, U.S. FOOT
X: 490394.66
Y: 615778.15
LAT.: N32.692708
LONG.: W104.498928

LAST TAKE POINT (LTP)

BOTTOM HOLE LOCATION (BHL)

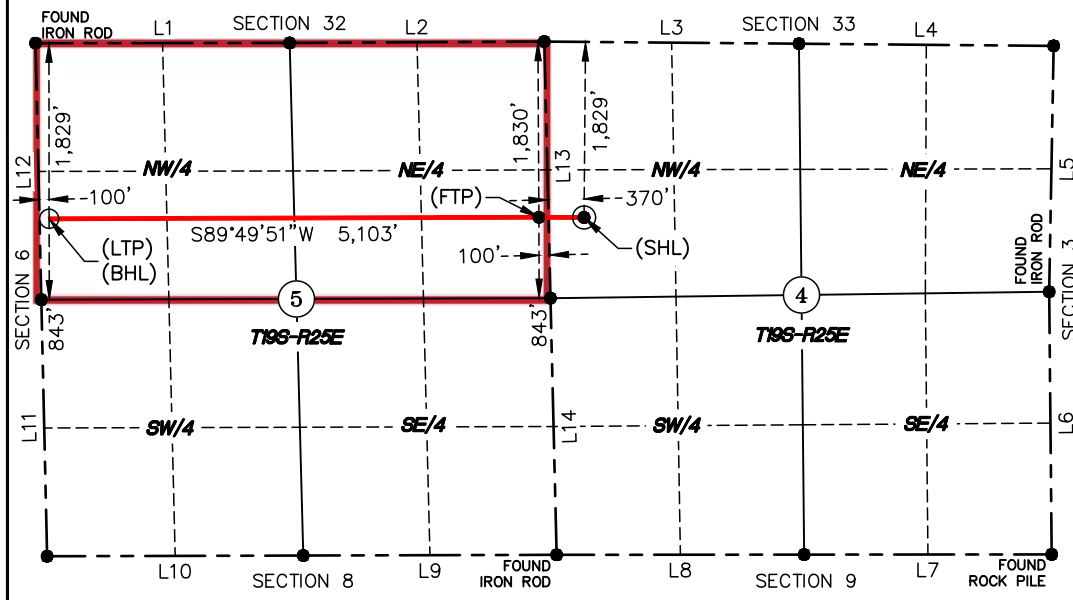
NAD 83, NM EAST ZONE, U.S. FOOT
X: 485291.80
Y: 615763.08
LAT.: N32.692644
LONG.: W104.515516

LINE TABLE		
LINE #	BEARING	LENGTH
L1	N89°57'20"E	2,648'
L2	N89°41'15"E	2,653'
L3	S89°30'55"E	2,653'
L4	S89°30'55"E	2,653'
L5	S01°02'46"W	2,562'
L6	S00°32'52"E	2,736'
L7	S89°57'11"W	2,579'

LINE TABLE		
LINE #	BEARING	LENGTH
L8	S89°57'11"W	2,579'
L9	S89°50'18"W	2,640'
L10	S89°50'31"W	2,668'
L11	N01°17'50"W	2,673'
L12	N01°17'50"W	2,673'
L13	S01°22'42"E	2,674'
L14	S01°22'42"E	2,674'



GPS DATUM
NAD83
NM EAST ZONE
0' 1000' 2000'

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Fatma Abdallah

08/25/2023

Signature

Date

Fatma Abdallah

Printed Name

fabdallah@silverbackexp.com

E-mail Address

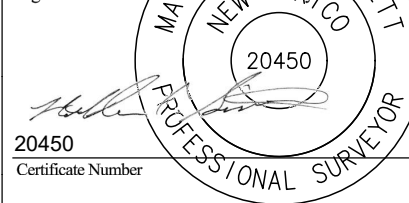
¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

7/28/23

Date of Survey

Signature and Seal of Professional Surveyor

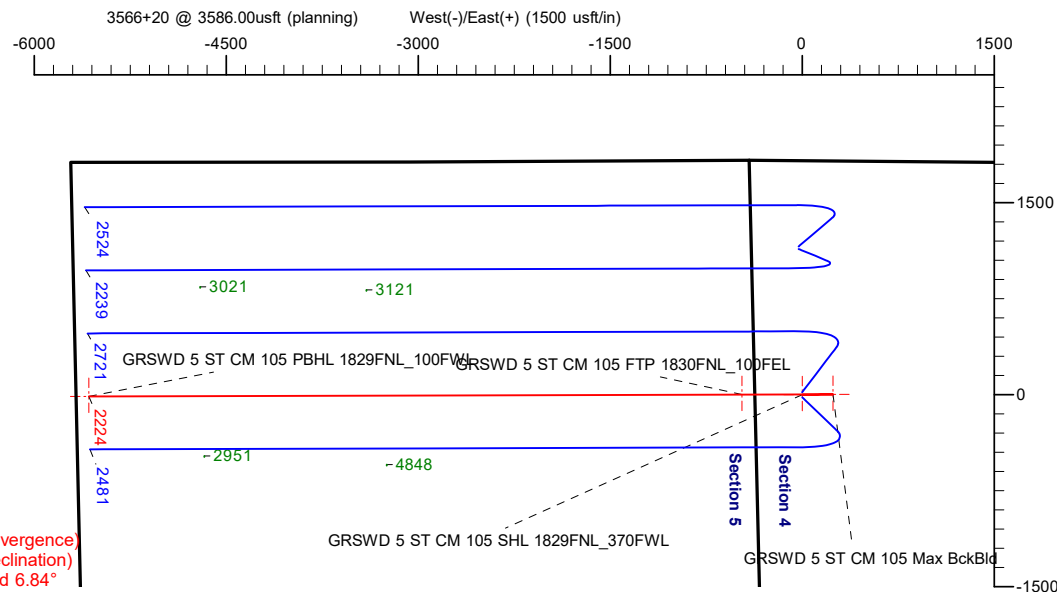
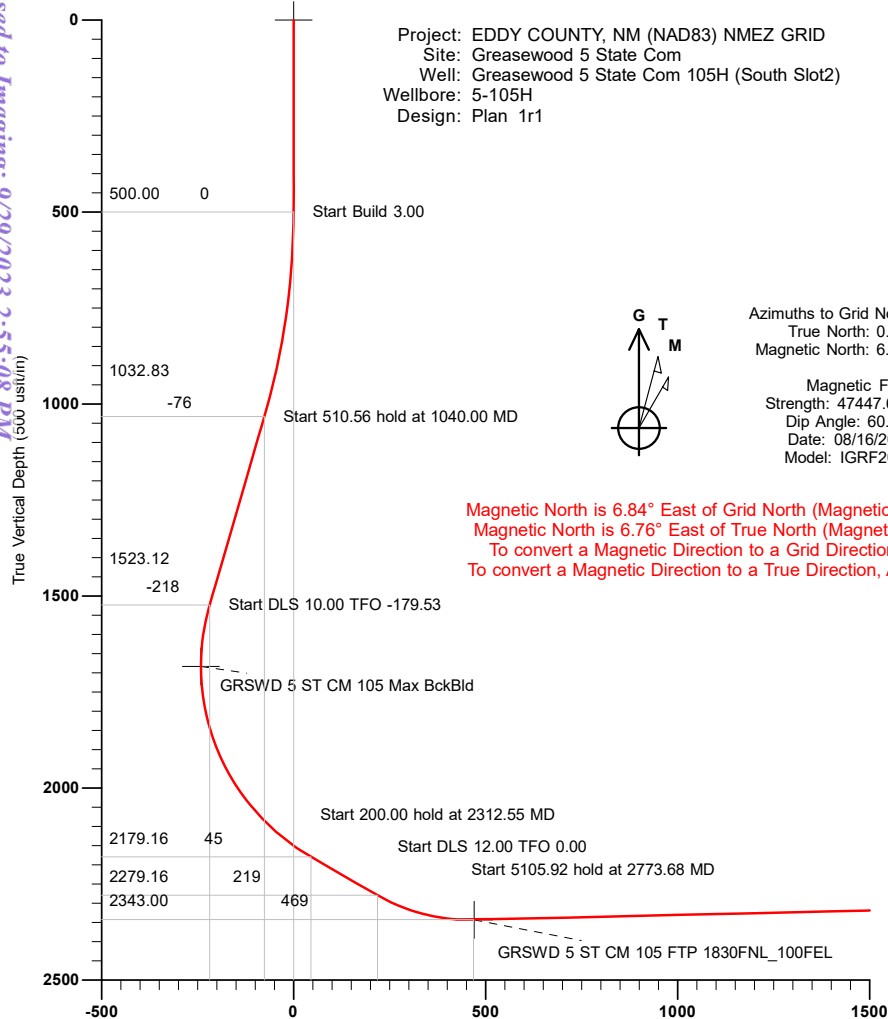


20450

Certificate Number

SILVERBACK EXPLORATION

Project: EDDY COUNTY, NM (NAD83) NMEZ GRID
Site: Greasewood 5 State Com
Well: Greasewood 5 State Com 105H (South Slot2)
Wellbore: 5-105H
Design: Plan 1r1

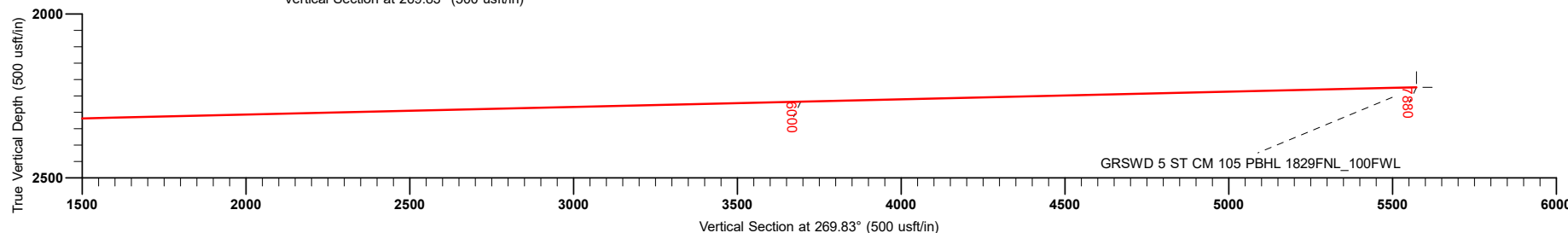


DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
GRSWD 5 ST CM 105 SHL 1829FNL_370FWL	0.00	0.00	0.00	615776.33	490864.85	Point
GRSWD 5 ST CM 105 Max BckBld	1683.41	3.13	241.01	615779.46	491105.86	Point
GRSWD 5 ST CM 105 PBHL 1829FNL_100FWL	2224.00	-13.25	-5573.05	615763.08	485291.80	Point
GRSWD 5 ST CM 105 FTP 1830FNL_100FEL	2343.00	1.82	-470.19	615778.15	490394.66	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
3	1040.00	16.20	89.30	1032.83	0.93	75.83	3.00	89.30	-75.83	Start 510.56 hold at 1040.00 MD
4	1550.56	16.20	89.30	1523.12	2.67	218.26	0.00	0.00	-218.27	Start DLS 10.00 TFO -179.53
5	2312.55	60.00	269.83	2179.16	3.04	-45.47	10.00	-179.53	45.47	Start 200.00 hold at 2312.55 MD
6	2512.55	60.00	269.83	2279.16	2.53	-218.68	0.00	0.00	218.67	Start DLS 12.00 TFO 0.00
7	2773.68	91.34	269.83	2343.00	1.79	-468.54	12.00	0.00	468.53	Start 5105.92 hold at 2773.68 MD
8	7879.60	91.34	269.83	2224.00	-13.25	-5573.05	0.00	0.00	5573.06	TD at 7879.60



SILVERBACK EXPLORATION

3566+20 @ 3586.00usft (planning)

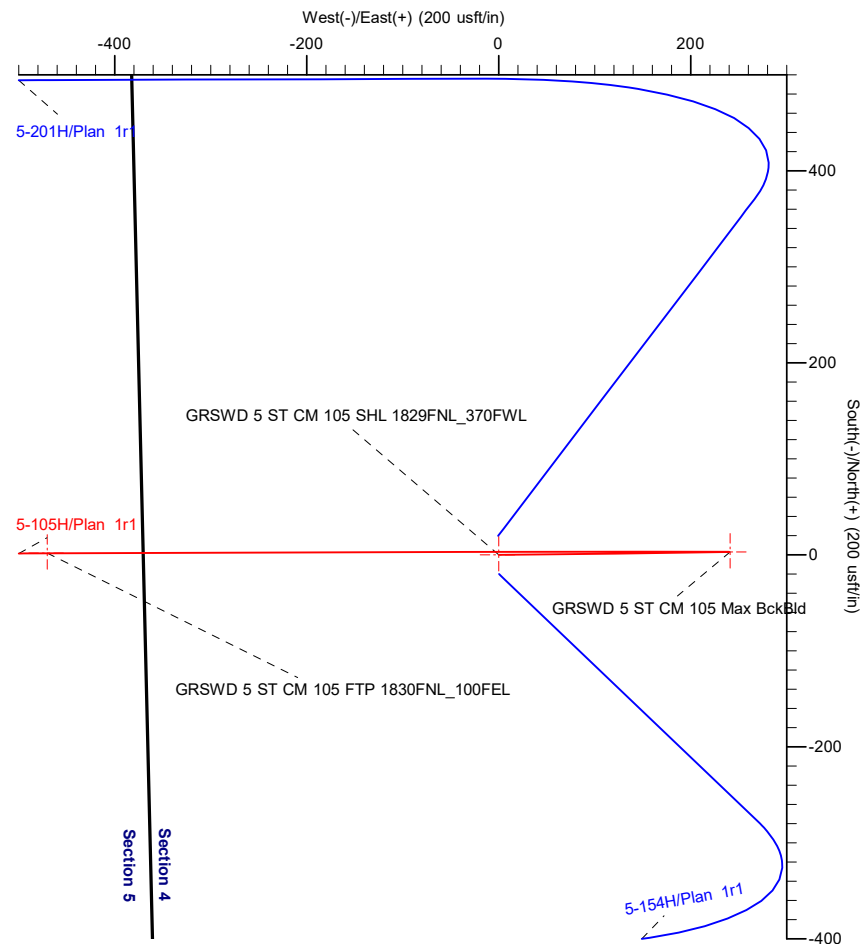
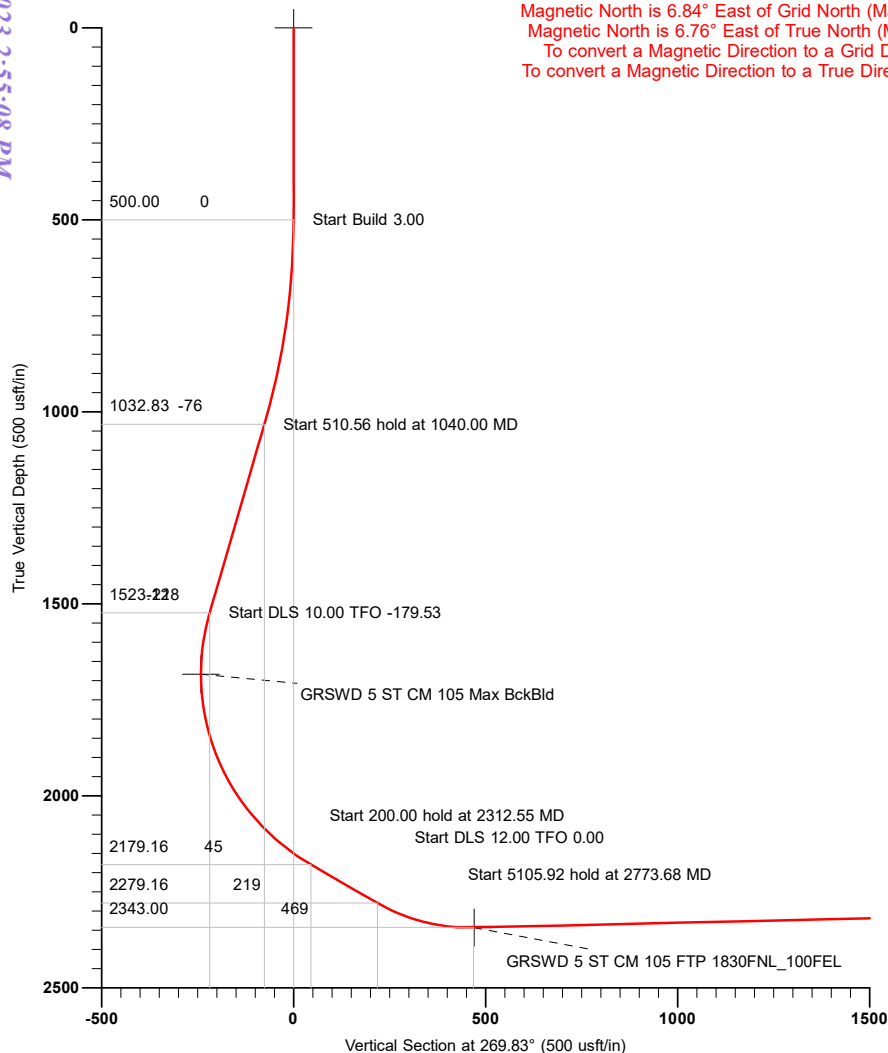
Project: EDDY COUNTY, NM (NAD83) NMEZ GRID
Site: Greasewood 5 State Com
Well: Greasewood 5 State Com 105H (South Slot2)
Wellbore: 5-105H
Design: Plan 1r1



Azimuths to Grid North
True North: 0.09°
Magnetic North: 6.84°

Magnetic Field
Strength: 47447.6nT
Dip Angle: 60.12°
Date: 08/16/2023
Model: IGRF2020

Magnetic North is 6.84° East of Grid North (Magnetic Convergence)
Magnetic North is 6.76° East of True North (Magnetic Declination)
To convert a Magnetic Direction to a Grid Direction, Add 6.84°
To convert a Magnetic Direction to a True Direction, Add 6.76° East



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
GRSWD 5 ST CM 105 SHL 1829FNL_370FWL	0.00	0.00	0.00	615776.33	490864.85	Point
GRSWD 5 ST CM 105 Max BckBld	1683.41	3.13	241.01	615779.46	491105.86	Point
GRSWD 5 ST CM 105 PBHL 1829FNL_100FWL	2224.00	-13.25	-5573.05	615763.08	485291.80	Point
GRSWD 5 ST CM 105 FTP 1830FNL_100FEL	2343.00	1.82	-470.19	615778.15	490394.66	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
3	1040.00	16.20	89.30	1032.83	0.93	75.83	3.00	89.30	-75.83	Start 510.56 hold at 1040.00 MD
4	1550.56	16.20	89.30	1523.12	2.67	218.26	0.00	0.00	-218.27	Start DLS 10.00 TFO -179.53
5	2312.55	60.00	269.83	2179.16	3.04	-45.47	10.00	-179.53	45.47	Start 200.00 hold at 2312.55 MD
6	2512.55	60.00	269.83	2279.16	2.53	-218.68	0.00	0.00	218.67	Start DLS 12.00 TFO 0.00
7	2773.68	91.34	269.83	2343.00	1.79	-468.54	12.00	0.00	468.53	Start 5105.92 hold at 2773.68 MD
8	7879.60	91.34	269.83	2224.00	-13.25	-5573.05	0.00	0.00	5573.06	TD at 7879.60

SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID

Greasewood 5 State Com

Greasewood 5 State Com 105H (South Slot2)

5-105H

Plan: Plan 1r1

Standard Planning Report

18 August, 2023

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Company:	SILVERBACK EXPLORATION	TVD Reference:	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	MD Reference:	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	North Reference:	Grid
Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Wellbore:	5-105H		
Design:	Plan 1r1		

Project	EDDY COUNTY, NM (NAD83) NMEZ GRID		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Greasewood 5 State Com			
Site Position:		Northing:	616,915.56 usft	Latitude:	32.6958362
From:	Map	Easting:	490,837.43 usft	Longitude:	-104.4974948
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.09 °

Well	Greasewood 5 State Com 105H (South Slot2)					
Well Position	+N/-S	-1,139.23 usft	Northing:	615,776.33 usft	Latitude:	32.6927050
	+E/-W	27.42 usft	Easting:	490,864.85 usft	Longitude:	-104.4973999
Position Uncertainty	0.00 usft		Wellhead Elevation:		Ground Level:	3,566.00 usft

Wellbore	5-105H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	08/16/23	6.76	60.12	47,447.63083529

Design	Plan 1r1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.83

Plan Survey Tool Program	Date	08/18/23		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	7,878.88 Plan 1r1 (5-105H)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,040.00	16.20	89.30	1,032.83	0.93	75.83	3.00	3.00	0.00	89.30	
1,550.56	16.20	89.30	1,523.12	2.67	218.26	0.00	0.00	0.00	0.00	
2,312.55	60.00	269.83	2,179.16	3.04	-45.47	10.00	5.75	-23.55	-179.53	
2,512.55	60.00	269.83	2,279.16	2.53	-218.68	0.00	0.00	0.00	0.00	
2,773.68	91.34	269.83	2,343.00	1.79	-468.54	12.00	12.00	0.00	0.00	
7,879.60	91.34	269.83	2,224.00	-13.25	-5,573.05	0.00	0.00	0.00	0.00	GRSWD 5 ST CM 10'

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Company:	SILVERBACK EXPLORATION	TVD Reference:	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	MD Reference:	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	North Reference:	Grid
Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Wellbore:	5-105H		
Design:	Plan 1r1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 3.00									
600.00	3.00	89.30	599.95	0.03	2.62	-2.62	3.00	3.00	0.00
700.00	6.00	89.30	699.63	0.13	10.46	-10.46	3.00	3.00	0.00
800.00	9.00	89.30	798.77	0.29	23.51	-23.51	3.00	3.00	0.00
900.00	12.00	89.30	897.08	0.51	41.73	-41.73	3.00	3.00	0.00
1,000.00	15.00	89.30	994.31	0.80	65.07	-65.07	3.00	3.00	0.00
1,040.00	16.20	89.30	1,032.83	0.93	75.83	-75.83	3.00	3.00	0.00
Start 510.56 hold at 1040.00 MD									
1,100.00	16.20	89.30	1,090.45	1.13	92.57	-92.57	0.00	0.00	0.00
1,200.00	16.20	89.30	1,186.48	1.47	120.46	-120.47	0.00	0.00	0.00
1,300.00	16.20	89.30	1,282.51	1.81	148.36	-148.36	0.00	0.00	0.00
1,400.00	16.20	89.30	1,378.54	2.15	176.26	-176.26	0.00	0.00	0.00
1,500.00	16.20	89.30	1,474.57	2.49	204.15	-204.16	0.00	0.00	0.00
1,550.56	16.20	89.30	1,523.12	2.67	218.26	-218.27	0.00	0.00	0.00
Start DLS 10.00 TFO -179.53									
1,600.00	11.26	89.09	1,571.13	2.83	229.99	-229.99	10.00	-10.00	-0.42
1,650.00	6.26	88.55	1,620.54	2.97	237.59	-237.60	10.00	-10.00	-1.08
1,700.00	1.26	83.76	1,670.41	3.10	240.87	-240.88	10.00	-9.99	-9.58
1,750.00	3.75	271.77	1,720.38	3.21	239.78	-239.79	10.00	4.97	-343.98
1,800.00	8.75	270.61	1,770.07	3.30	234.34	-234.35	10.00	10.00	-2.31
1,850.00	13.75	270.29	1,819.10	3.38	224.60	-224.61	10.00	10.00	-0.64
1,900.00	18.74	270.14	1,867.08	3.43	210.61	-210.62	10.00	10.00	-0.30
1,950.00	23.74	270.05	1,913.67	3.45	192.50	-192.51	10.00	10.00	-0.18
2,000.00	28.74	269.99	1,958.50	3.46	170.40	-170.41	10.00	10.00	-0.12
2,050.00	33.74	269.95	2,001.24	3.45	144.47	-144.48	10.00	10.00	-0.09
2,100.00	38.74	269.92	2,041.55	3.42	114.92	-114.93	10.00	10.00	-0.07
2,150.00	43.74	269.89	2,079.13	3.36	81.97	-81.98	10.00	10.00	-0.05
2,200.00	48.74	269.87	2,113.70	3.29	45.86	-45.87	10.00	10.00	-0.04
2,250.00	53.74	269.85	2,144.99	3.19	6.89	-6.89	10.00	10.00	-0.04
2,300.00	58.74	269.83	2,172.76	3.08	-34.67	34.66	10.00	10.00	-0.03
2,312.55	60.00	269.83	2,179.16	3.04	-45.47	45.47	10.00	10.00	-0.03
Start 200.00 hold at 2312.55 MD									
2,400.00	60.00	269.83	2,222.88	2.82	-121.20	121.20	0.00	0.00	0.00
2,500.00	60.00	269.83	2,272.88	2.56	-207.81	207.80	0.00	0.00	0.00
2,512.55	60.00	269.83	2,279.16	2.53	-218.68	218.67	0.00	0.00	0.00
Start DLS 12.00 TFO 0.00									
2,525.00	61.49	269.83	2,285.24	2.50	-229.54	229.53	12.00	12.00	0.00
2,550.00	64.49	269.83	2,296.59	2.43	-251.81	251.80	12.00	12.00	0.00
2,575.00	67.49	269.83	2,306.76	2.36	-274.64	274.64	12.00	12.00	0.00
2,600.00	70.49	269.83	2,315.72	2.29	-297.98	297.97	12.00	12.00	0.00
2,625.00	73.49	269.83	2,323.45	2.22	-321.75	321.74	12.00	12.00	0.00
2,650.00	76.49	269.83	2,329.92	2.15	-345.90	345.89	12.00	12.00	0.00
2,675.00	79.49	269.83	2,335.12	2.08	-370.35	370.34	12.00	12.00	0.00
2,700.00	82.49	269.83	2,339.04	2.01	-395.04	395.03	12.00	12.00	0.00
2,725.00	85.49	269.83	2,341.65	1.93	-419.90	419.89	12.00	12.00	0.00
2,750.00	88.49	269.83	2,342.96	1.86	-444.86	444.85	12.00	12.00	0.00

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Company:	SILVERBACK EXPLORATION	TVD Reference:	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	MD Reference:	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	North Reference:	Grid
Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Wellbore:	5-105H		
Design:	Plan 1r1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,773.68	91.34	269.83	2,343.00	1.79	-468.54	468.53	12.00	12.00	0.00
Start 5105.92 hold at 2773.68 MD									
2,800.00	91.34	269.83	2,342.39	1.71	-494.85	494.84	0.00	0.00	0.00
2,900.00	91.34	269.83	2,340.05	1.42	-594.82	594.81	0.00	0.00	0.00
3,000.00	91.34	269.83	2,337.72	1.12	-694.79	694.79	0.00	0.00	0.00
3,100.00	91.34	269.83	2,335.39	0.83	-794.77	794.76	0.00	0.00	0.00
3,200.00	91.34	269.83	2,333.06	0.54	-894.74	894.73	0.00	0.00	0.00
3,300.00	91.34	269.83	2,330.73	0.24	-994.71	994.71	0.00	0.00	0.00
3,400.00	91.34	269.83	2,328.40	-0.05	-1,094.68	1,094.68	0.00	0.00	0.00
3,500.00	91.34	269.83	2,326.07	-0.35	-1,194.66	1,194.65	0.00	0.00	0.00
3,600.00	91.34	269.83	2,323.74	-0.64	-1,294.63	1,294.62	0.00	0.00	0.00
3,700.00	91.34	269.83	2,321.41	-0.94	-1,394.60	1,394.60	0.00	0.00	0.00
3,800.00	91.34	269.83	2,319.08	-1.23	-1,494.57	1,494.57	0.00	0.00	0.00
3,900.00	91.34	269.83	2,316.75	-1.53	-1,594.54	1,594.54	0.00	0.00	0.00
4,000.00	91.34	269.83	2,314.42	-1.82	-1,694.52	1,694.52	0.00	0.00	0.00
4,100.00	91.34	269.83	2,312.09	-2.12	-1,794.49	1,794.49	0.00	0.00	0.00
4,200.00	91.34	269.83	2,309.76	-2.41	-1,894.46	1,894.46	0.00	0.00	0.00
4,300.00	91.34	269.83	2,307.43	-2.71	-1,994.43	1,994.43	0.00	0.00	0.00
4,400.00	91.34	269.83	2,305.10	-3.00	-2,094.41	2,094.41	0.00	0.00	0.00
4,500.00	91.34	269.83	2,302.77	-3.29	-2,194.38	2,194.38	0.00	0.00	0.00
4,600.00	91.34	269.83	2,300.43	-3.59	-2,294.35	2,294.35	0.00	0.00	0.00
4,700.00	91.34	269.83	2,298.10	-3.88	-2,394.32	2,394.32	0.00	0.00	0.00
4,800.00	91.34	269.83	2,295.77	-4.18	-2,494.30	2,494.30	0.00	0.00	0.00
4,900.00	91.34	269.83	2,293.44	-4.47	-2,594.27	2,594.27	0.00	0.00	0.00
5,000.00	91.34	269.83	2,291.11	-4.77	-2,694.24	2,694.24	0.00	0.00	0.00
5,100.00	91.34	269.83	2,288.78	-5.06	-2,794.21	2,794.22	0.00	0.00	0.00
5,200.00	91.34	269.83	2,286.45	-5.36	-2,894.19	2,894.19	0.00	0.00	0.00
5,300.00	91.34	269.83	2,284.12	-5.65	-2,994.16	2,994.16	0.00	0.00	0.00
5,400.00	91.34	269.83	2,281.79	-5.95	-3,094.13	3,094.13	0.00	0.00	0.00
5,500.00	91.34	269.83	2,279.46	-6.24	-3,194.10	3,194.11	0.00	0.00	0.00
5,600.00	91.34	269.83	2,277.13	-6.53	-3,294.08	3,294.08	0.00	0.00	0.00
5,700.00	91.34	269.83	2,274.80	-6.83	-3,394.05	3,394.05	0.00	0.00	0.00
5,800.00	91.34	269.83	2,272.47	-7.12	-3,494.02	3,494.03	0.00	0.00	0.00
5,900.00	91.34	269.83	2,270.14	-7.42	-3,593.99	3,594.00	0.00	0.00	0.00
6,000.00	91.34	269.83	2,267.81	-7.71	-3,693.97	3,693.97	0.00	0.00	0.00
6,100.00	91.34	269.83	2,265.48	-8.01	-3,793.94	3,793.94	0.00	0.00	0.00
6,200.00	91.34	269.83	2,263.14	-8.30	-3,893.91	3,893.92	0.00	0.00	0.00
6,300.00	91.34	269.83	2,260.81	-8.60	-3,993.88	3,993.89	0.00	0.00	0.00
6,400.00	91.34	269.83	2,258.48	-8.89	-4,093.85	4,093.86	0.00	0.00	0.00
6,500.00	91.34	269.83	2,256.15	-9.19	-4,193.83	4,193.84	0.00	0.00	0.00
6,600.00	91.34	269.83	2,253.82	-9.48	-4,293.80	4,293.81	0.00	0.00	0.00
6,700.00	91.34	269.83	2,251.49	-9.78	-4,393.77	4,393.78	0.00	0.00	0.00
6,800.00	91.34	269.83	2,249.16	-10.07	-4,493.74	4,493.75	0.00	0.00	0.00
6,900.00	91.34	269.83	2,246.83	-10.36	-4,593.72	4,593.73	0.00	0.00	0.00
7,000.00	91.34	269.83	2,244.50	-10.66	-4,693.69	4,693.70	0.00	0.00	0.00
7,100.00	91.34	269.83	2,242.17	-10.95	-4,793.66	4,793.67	0.00	0.00	0.00
7,200.00	91.34	269.83	2,239.84	-11.25	-4,893.63	4,893.65	0.00	0.00	0.00
7,300.00	91.34	269.83	2,237.51	-11.54	-4,993.61	4,993.62	0.00	0.00	0.00
7,400.00	91.34	269.83	2,235.18	-11.84	-5,093.58	5,093.59	0.00	0.00	0.00
7,500.00	91.34	269.83	2,232.85	-12.13	-5,193.55	5,193.56	0.00	0.00	0.00
7,600.00	91.34	269.83	2,230.52	-12.43	-5,293.52	5,293.54	0.00	0.00	0.00
7,700.00	91.34	269.83	2,228.19	-12.72	-5,393.50	5,393.51	0.00	0.00	0.00
7,800.00	91.34	269.83	2,225.86	-13.02	-5,493.47	5,493.48	0.00	0.00	0.00

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Company:	SILVERBACK EXPLORATION	TVD Reference:	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	MD Reference:	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	North Reference:	Grid
Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Wellbore:	5-105H		
Design:	Plan 1r1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,879.60	91.34	269.83	2,224.00	-13.25	-5,573.05	5,573.06	0.00	0.00	0.00
TD at 7879.60									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
GRSWD 5 ST CM 105 E	0.00	360.00	0.00	0.00	0.00	615,776.33	490,864.85	32.6927050	-104.4973999
- plan hits target center									
- Point									
GRSWD 5 ST CM 105 N	0.00	360.00	1,683.41	3.13	241.01	615,779.46	491,105.86	32.6927146	-104.4966165
- plan misses target center by 0.01usft at 1713.00usft MD (1683.41 TVD, 3.13 N, 241.01 E)									
- Point									
GRSWD 5 ST CM 105 F	0.00	0.00	2,224.00	-13.25	-5,573.05	615,763.08	485,291.80	32.6926435	-104.5155156
- plan hits target center									
- Point									
GRSWD 5 ST CM 105 F	0.00	360.00	2,343.00	1.82	-470.19	615,778.15	490,394.66	32.6927080	-104.4989284
- plan misses target center by 0.05usft at 2775.33usft MD (2342.96 TVD, 1.79 N, -470.19 E)									
- Point									

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
500.00	500.00	0.00	0.00	Start Build 3.00	
1,040.00	1,032.83	0.93	75.83	Start 510.56 hold at 1040.00 MD	
1,550.56	1,523.12	2.67	218.26	Start DLS 10.00 TFO -179.53	
2,312.55	2,179.16	3.04	-45.47	Start 200.00 hold at 2312.55 MD	
2,512.55	2,279.16	2.53	-218.68	Start DLS 12.00 TFO 0.00	
2,773.68	2,343.00	1.79	-468.54	Start 5105.92 hold at 2773.68 MD	
7,879.60	2,224.00	-13.25	-5,573.05	TD at 7879.60	

SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID

Greasewood 5 State Com

Greasewood 5 State Com 105H (South Slot2)

5-105H

Plan 1r1

Anticollision Report

18 August, 2023

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Reference	Plan 1r1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 0.00 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	08/18/23		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	7,878.88	Plan 1r1 (5-105H)	MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation	Warning
Offset Well - Wellbore - Design						
Greasewood 5 State Com						
Greasewood 5 State Com 104H (North Slot2) - 5-104H -	5,229.48	5,212.38	986.03	836.28	6.584	CC
Greasewood 5 State Com 104H (North Slot2) - 5-104H -	7,879.60	7,862.48	986.11	707.60	3.541	ES, SF
Greasewood 5 State Com 153H (North Slot1) - 5-153H -						Out of range
Greasewood 5 State Com 154H (South Slot3) - 5-154H -	500.00	500.00	20.00	16.07	5.090	CC, ES
Greasewood 5 State Com 154H (South Slot3) - 5-154H -	7,879.60	8,209.41	486.51	243.81	2.005	SF
Greasewood 5 State Com 201H (South Slot1) - 5-201H -	500.00	500.00	20.00	16.07	5.091	CC, ES
Greasewood 5 State Com 201H (South Slot1) - 5-201H -	7,879.60	8,415.96	700.10	493.91	3.395	SF
Greasewood BD State 1 (Offset) PA - GW BD ST 1 - GW	5,500.00	2,308.50	540.98	408.75	4.091	SF
Greasewood BD State 1 (Offset) PA - GW BD ST 1 - GW	5,553.27	2,307.26	538.36	407.54	4.115	CC, ES
Greasewood BD State 10 (Offset) Active - GW BD ST 1	5,707.07	2,303.70	826.92	689.34	6.010	CC, ES
Greasewood BD State 10 (Offset) Active - GW BD ST 1	5,800.00	2,301.54	832.13	690.58	5.879	SF
Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW	6,900.00	2,275.99	473.48	268.07	2.305	SF
Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW	6,978.02	2,274.18	467.01	267.03	2.335	CC, ES
Greasewood BD State 9 (Offset) PA - GW BD ST 9 - GW	7,006.26	2,276.07	855.57	683.39	4.969	CC, ES
Greasewood BD State 9 (Offset) PA - GW BD ST 9 - GW	7,100.00	2,273.82	860.69	685.16	4.903	SF

Offset Design	Greasewood 5 State Com - Greasewood 5 State Com 104H (North Slot2) - 5-104H - Plan 1r1												Offset Site Error:	0.00 usft
Survey Program:	O-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Between Centres (usft)	Between Ellipses (usft)						
1,950.00	1,913.67	2,016.43	1,960.92	12.24	12.92	88.32	999.72	140.81	998.72	979.39	19.32	51.680		
2,000.00	1,958.50	2,056.65	1,994.88	12.58	13.17	88.44	997.18	119.43	995.69	976.22	19.47	51.141		
2,050.00	2,001.24	2,100.00	2,029.73	12.88	13.41	88.52	994.82	93.77	993.07	973.40	19.66	50.500		
2,100.00	2,041.55	2,136.64	2,057.62	13.15	13.60	88.62	993.12	70.09	990.85	970.98	19.87	49.861		
2,150.00	2,079.13	2,176.47	2,086.19	13.39	13.80	88.70	991.60	42.37	989.06	968.88	20.17	49.026		
2,200.00	2,113.70	2,216.25	2,112.74	13.59	13.98	88.78	990.43	12.79	987.70	967.13	20.57	48.016		
2,250.00	2,144.99	2,256.00	2,137.19	13.76	14.16	88.85	989.61	-18.53	986.78	965.70	21.08	46.812		
2,300.00	2,172.76	2,300.00	2,161.67	13.90	14.35	88.92	989.11	-55.07	986.31	964.53	21.78	45.283		
2,312.55	2,179.16	2,305.73	2,164.65	13.92	14.37	88.93	989.08	-59.97	986.25	964.34	21.91	45.018		
2,347.03	2,196.40	2,337.45	2,180.60	13.95	14.47	88.94	988.99	-87.38	986.23	963.67	22.56	43.713		
2,400.00	2,222.88	2,390.41	2,207.08	14.00	14.64	88.94	988.85	-133.26	986.23	962.58	23.66	41.689		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood 5 State Com 104H (North Slot2) - 5-104H - Plan 1r1										Offset Site Error:	0.00 usft
Survey Program:		0-MWD										Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.00	2,272.88	2,490.41	2,257.08	14.17	15.13	88.94	988.59	-219.86	986.23	960.09	26.14	37.731	
2,512.55	2,279.16	2,502.97	2,263.36	14.21	15.20	88.94	988.56	-230.73	986.23	959.77	26.47	37.264	
2,525.00	2,285.24	2,515.41	2,269.58	14.25	15.28	88.95	988.53	-241.51	986.23	959.43	26.80	36.797	
2,550.00	2,296.59	2,539.55	2,281.16	14.37	15.46	88.99	988.47	-262.68	986.22	958.73	27.49	35.873	
2,575.00	2,306.76	2,563.68	2,291.65	14.54	15.66	89.04	988.40	-284.40	986.20	957.98	28.22	34.948	
2,600.00	2,315.72	2,587.84	2,301.05	14.77	15.89	89.08	988.34	-306.66	986.19	957.21	28.98	34.025	
2,625.00	2,323.45	2,612.05	2,309.33	15.07	16.14	89.13	988.27	-329.41	986.18	956.39	29.79	33.110	
2,650.00	2,329.92	2,636.30	2,316.45	15.43	16.42	89.19	988.20	-352.59	986.16	955.54	30.62	32.207	
2,675.00	2,335.12	2,660.59	2,322.39	15.83	16.72	89.24	988.13	-376.14	986.15	954.67	31.48	31.324	
2,700.00	2,339.04	2,684.93	2,327.14	16.26	17.05	89.30	988.06	-400.01	986.14	953.77	32.37	30.463	
2,725.00	2,341.65	2,709.32	2,330.67	16.71	17.41	89.36	987.99	-424.14	986.13	952.84	33.28	29.630	
2,750.00	2,342.96	2,733.76	2,332.96	17.17	17.78	89.42	987.92	-448.46	986.11	951.90	34.21	28.826	
2,773.68	2,343.00	2,756.96	2,333.99	17.61	18.16	89.48	987.85	-471.64	986.10	951.00	35.10	28.094	
2,800.00	2,342.39	2,782.93	2,333.86	18.12	18.59	89.50	987.77	-497.61	986.10	949.99	36.11	27.309	
2,900.00	2,340.05	2,882.93	2,332.00	20.13	20.41	89.53	987.48	-597.59	986.09	945.96	40.13	24.569	
3,000.00	2,337.72	2,982.93	2,330.14	22.25	22.39	89.56	987.18	-697.57	986.09	941.75	44.34	22.238	
3,100.00	2,335.39	3,082.93	2,328.28	24.43	24.48	89.59	986.88	-797.55	986.08	937.40	48.68	20.255	
3,200.00	2,333.06	3,182.93	2,326.42	26.66	26.64	89.61	986.59	-897.53	986.08	932.95	53.13	18.561	
3,300.00	2,330.73	3,282.92	2,324.56	28.93	28.85	89.64	986.29	-997.51	986.07	928.43	57.64	17.106	
3,400.00	2,328.40	3,382.92	2,322.70	31.23	31.11	89.67	986.00	-1,097.50	986.07	923.85	62.22	15.848	
3,500.00	2,326.07	3,482.92	2,320.84	33.55	33.40	89.70	985.70	-1,197.48	986.07	919.22	66.85	14.751	
3,600.00	2,323.74	3,582.92	2,318.98	35.89	35.71	89.72	985.40	-1,297.46	986.06	914.55	71.51	13.789	
3,700.00	2,321.41	3,682.92	2,317.12	38.24	38.04	89.75	985.11	-1,397.44	986.06	909.86	76.20	12.940	
3,800.00	2,319.08	3,782.92	2,315.26	40.60	40.38	89.78	984.81	-1,497.42	986.06	905.13	80.92	12.185	
3,900.00	2,316.75	3,882.92	2,313.40	42.98	42.74	89.81	984.52	-1,597.40	986.05	900.39	85.67	11.510	
4,000.00	2,314.42	3,982.92	2,311.54	45.36	45.11	89.83	984.22	-1,697.38	986.05	895.62	90.43	10.904	
4,100.00	2,312.09	4,082.92	2,309.68	47.75	47.49	89.86	983.92	-1,797.36	986.05	890.85	95.20	10.357	
4,200.00	2,309.76	4,182.91	2,307.82	50.15	49.88	89.89	983.63	-1,897.34	986.04	886.05	99.99	9.861	
4,300.00	2,307.43	4,282.91	2,305.95	52.56	52.27	89.91	983.33	-1,997.33	986.04	881.25	104.79	9.410	
4,400.00	2,305.10	4,382.91	2,304.09	54.96	54.67	89.94	983.04	-2,097.31	986.04	876.44	109.60	8.997	
4,500.00	2,302.77	4,482.91	2,302.23	57.37	57.08	89.97	982.74	-2,197.29	986.04	871.62	114.42	8.618	
4,600.00	2,300.43	4,582.91	2,300.37	59.79	59.48	90.00	982.44	-2,297.27	986.04	866.79	119.25	8.269	
4,700.00	2,298.10	4,682.91	2,298.51	62.21	61.90	90.02	982.15	-2,397.25	986.04	861.96	124.08	7.947	
4,800.00	2,295.77	4,782.91	2,296.65	64.63	64.31	90.05	981.85	-2,497.23	986.03	857.12	128.92	7.649	
4,900.00	2,293.44	4,882.91	2,294.79	67.05	66.73	90.08	981.56	-2,597.21	986.03	852.27	133.76	7.372	
5,000.00	2,291.11	4,982.91	2,292.93	69.48	69.15	90.11	981.26	-2,697.19	986.03	847.42	138.61	7.114	
5,100.00	2,288.78	5,082.90	2,291.07	71.91	71.58	90.13	980.96	-2,797.18	986.03	842.57	143.46	6.873	
5,200.00	2,286.45	5,182.90	2,289.21	74.34	74.00	90.16	980.67	-2,897.16	986.03	837.71	148.32	6.648	
5,229.48	2,285.76	5,212.38	2,288.66	75.05	74.72	90.17	980.58	-2,926.63	986.03	836.28	149.75	6.584 CC	
5,300.00	2,284.12	5,282.90	2,287.35	76.77	76.43	90.19	980.37	-2,997.14	986.03	832.85	153.18	6.437	
5,400.00	2,281.79	5,382.90	2,285.49	79.20	78.86	90.22	980.08	-3,097.12	986.03	827.99	158.04	6.239	
5,500.00	2,279.46	5,482.90	2,283.63	81.64	81.29	90.24	979.78	-3,197.10	986.03	823.12	162.91	6.053	
5,600.00	2,277.13	5,582.90	2,281.77	84.07	83.72	90.27	979.48	-3,297.08	986.03	818.26	167.78	5.877	
5,700.00	2,274.80	5,682.90	2,279.91	86.51	86.16	90.30	979.19	-3,397.06	986.04	813.39	172.65	5.711	
5,800.00	2,272.47	5,782.90	2,278.05	88.95	88.59	90.32	978.89	-3,497.04	986.04	808.51	177.52	5.554	
5,900.00	2,270.14	5,882.90	2,276.19	91.39	91.03	90.35	978.60	-3,597.02	986.04	803.64	182.40	5.406	
6,000.00	2,267.81	5,982.89	2,274.33	93.83	93.47	90.38	978.30	-3,697.01	986.04	798.76	187.27	5.265	
6,100.00	2,265.48	6,082.89	2,272.47	96.27	95.91	90.41	978.00	-3,796.99	986.04	793.89	192.15	5.132	
6,200.00	2,263.14	6,182.89	2,270.61	98.71	98.35	90.43	977.71	-3,896.97	986.04	789.01	197.03	5.004	
6,300.00	2,260.81	6,282.89	2,268.74	101.15	100.79	90.46	977.41	-3,996.95	986.05	784.13	201.91	4.883	
6,400.00	2,258.48	6,382.89	2,266.88	103.59	103.23	90.49	977.12	-4,096.93	986.05	779.25	206.80	4.768	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood 5 State Com 104H (North Slot2) - 5-104H - Plan 1r1										Offset Site Error:	0.00 usft
Survey Program:		0-MWD										Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
6,500.00	2,256.15	6,482.89	2,265.02	106.03	105.67	90.52	976.82	-4,196.91	986.05	774.37	211.68	4.658	
6,600.00	2,253.82	6,582.89	2,263.16	108.48	108.11	90.54	976.52	-4,296.89	986.05	769.49	216.57	4.553	
6,700.00	2,251.49	6,682.89	2,261.30	110.92	110.55	90.57	976.23	-4,396.87	986.06	764.60	221.45	4.453	
6,800.00	2,249.16	6,782.89	2,259.44	113.37	113.00	90.60	975.93	-4,496.85	986.06	759.72	226.34	4.357	
6,900.00	2,246.83	6,882.88	2,257.58	115.81	115.44	90.62	975.64	-4,596.84	986.06	754.84	231.23	4.264	
7,000.00	2,244.50	6,982.88	2,255.72	118.26	117.89	90.65	975.34	-4,696.82	986.07	749.95	236.12	4.176	
7,100.00	2,242.17	7,082.88	2,253.86	120.70	120.33	90.68	975.04	-4,796.80	986.07	745.07	241.01	4.091	
7,200.00	2,239.84	7,182.88	2,252.00	123.15	122.78	90.71	974.75	-4,896.78	986.08	740.18	245.90	4.010	
7,300.00	2,237.51	7,282.88	2,250.14	125.60	125.22	90.73	974.45	-4,996.76	986.08	735.29	250.79	3.932	
7,400.00	2,235.18	7,382.88	2,248.28	128.04	127.67	90.76	974.16	-5,096.74	986.09	730.41	255.68	3.857	
7,500.00	2,232.85	7,482.88	2,246.42	130.49	130.11	90.79	973.86	-5,196.72	986.09	725.52	260.57	3.784	
7,600.00	2,230.52	7,582.88	2,244.56	132.94	132.56	90.82	973.56	-5,296.70	986.10	720.63	265.46	3.715	
7,700.00	2,228.19	7,682.88	2,242.70	135.39	135.01	90.84	973.27	-5,396.69	986.10	715.74	270.36	3.647	
7,800.00	2,225.86	7,782.87	2,240.84	137.84	137.46	90.87	972.97	-5,496.67	986.11	710.86	275.25	3.583	
7,879.60	2,224.00	7,862.48	2,239.36	139.15	139.41	90.89	972.74	-5,576.25	986.11	707.60	278.51	3.541 ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood 5 State Com 154H (South Slot3) - 5-154H - Plan 1r1										Offset Site Error:	0.00 usft
Survey Program:		0-MWD										Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	178.62	-19.99	0.48	20.00				
100.00	100.00	100.00	100.00	0.31	0.31	178.62	-19.99	0.48	20.00	19.52	0.47	42.326	
200.00	200.00	200.00	200.00	0.95	0.95	178.62	-19.99	0.48	20.00	18.49	1.50	13.291	
300.00	300.00	300.00	300.00	1.46	1.46	178.62	-19.99	0.48	20.00	17.63	2.36	8.455	
400.00	400.00	400.00	400.00	1.89	1.89	178.62	-19.99	0.48	20.00	16.84	3.15	6.339	
500.00	500.00	500.00	500.00	2.31	2.33	178.62	-19.99	0.48	20.00	16.07	3.93	5.090 CC, ES	
600.00	599.95	599.29	599.25	3.13	2.61	92.00	-21.53	2.09	21.58	16.84	4.74	4.548	
700.00	699.63	698.32	698.00	4.80	4.32	96.83	-26.61	7.40	26.96	20.60	6.35	4.242	
800.00	798.77	796.92	795.81	6.09	5.71	101.24	-35.16	16.36	36.29	28.77	7.52	4.827	
900.00	897.08	894.88	892.22	7.16	6.82	104.36	-47.11	28.86	49.57	41.04	8.52	5.815	
1,000.00	994.31	992.00	986.80	8.10	7.77	106.33	-62.31	44.76	66.71	57.21	9.50	7.021	
1,040.00	1,032.83	1,030.57	1,024.03	8.22	8.11	106.88	-69.26	52.04	74.63	64.74	9.89	7.545	
1,100.00	1,090.45	1,088.15	1,079.22	8.33	8.61	107.30	-80.61	63.91	87.34	76.85	10.49	8.325	
1,200.00	1,186.48	1,183.31	1,169.26	8.52	9.36	105.92	-101.86	86.15	110.23	98.63	11.60	9.500	
1,300.00	1,282.51	1,277.06	1,256.36	8.73	10.09	103.22	-125.80	111.20	135.46	122.59	12.87	10.526	
1,400.00	1,378.54	1,371.92	1,343.14	8.95	10.55	100.24	-152.27	138.91	162.77	148.66	14.12	11.529	
1,500.00	1,474.57	1,467.78	1,430.74	9.18	10.79	98.02	-179.16	167.04	190.51	175.28	15.24	12.505	
1,550.56	1,523.12	1,516.24	1,475.03	9.30	10.89	97.14	-192.75	181.26	204.62	188.85	15.77	12.978	
1,600.00	1,571.13	1,563.52	1,518.24	9.52	10.99	97.41	-206.01	195.14	218.23	201.93	16.30	13.388	
1,650.00	1,620.54	1,610.85	1,561.50	10.03	11.10	97.09	-219.28	209.03	231.73	214.88	16.85	13.749	
1,700.00	1,670.41	1,657.36	1,604.01	10.53	11.21	100.31	-232.33	222.68	245.29	227.88	17.41	14.086	
1,750.00	1,720.38	1,702.68	1,645.42	10.63	11.32	-89.76	-245.04	235.98	259.35	240.71	18.64	13.915	
1,800.00	1,770.07	1,746.47	1,685.44	11.04	11.43	-90.92	-257.32	248.83	274.40	254.65	19.75	13.891	
1,850.00	1,819.10	1,788.39	1,723.75	11.47	11.54	-92.98	-269.07	261.13	290.95	270.70	20.25	14.365	
1,900.00	1,867.08	1,830.38	1,762.16	11.87	11.65	-95.30	-280.84	273.34	309.44	288.66	20.77	14.895	
1,950.00	1,913.67	1,880.42	1,808.82	12.24	11.85	-98.15	-294.67	284.95	329.27	307.75	21.52	15.303	
2,000.00	1,958.50	1,934.38	1,860.20	12.58	12.09	-100.85	-309.15	292.72	349.79	327.52	22.27	15.707	
2,050.00	2,001.24	1,993.16	1,916.90	12.88	12.25	-103.46	-324.28	295.48	370.57	347.71	22.86	16.214	
2,100.00	2,041.55	2,057.84	1,979.49	13.15	12.43	-106.01	-339.97	291.63	391.14	367.70	23.44	16.686	
2,150.00	2,079.13	2,129.70	2,048.34	13.39	12.85	-108.52	-355.98	278.94	410.94	386.86	24.09	17.061	
2,200.00	2,113.70	2,210.14	2,123.25	13.59	13.45	-111.00	-371.84	254.50	429.35	404.75	24.60	17.453	
2,250.00	2,144.99	2,300.47	2,202.87	13.76	14.11	-113.41	-386.68	214.73	445.59	420.68	24.91	17.891	
2,300.00	2,172.76	2,401.45	2,283.95	13.90	14.78	-115.65	-399.11	156.05	458.79	433.80	24.99	18.360	
2,312.55	2,179.16	2,428.47	2,303.91	13.92	14.95	-116.18	-401.64	138.01	461.52	436.55	24.97	18.486	
2,400.00	2,222.88	2,614.01	2,416.80	14.00	16.03	-118.49	-409.49	-8.03	469.48	444.42	25.06	18.732	
2,500.00	2,272.88	2,714.01	2,466.80	14.17	16.64	-118.49	-409.75	-94.63	469.48	442.41	27.07	17.342	
2,512.55	2,279.16	2,726.56	2,473.07	14.21	16.72	-118.49	-409.78	-105.50	469.48	442.15	27.33	17.180	
2,525.00	2,285.24	2,739.01	2,479.29	14.25	16.81	-118.49	-409.81	-116.28	469.56	441.97	27.58	17.023	
2,550.00	2,296.59	2,763.97	2,491.78	14.37	16.98	-118.57	-409.88	-137.90	470.18	442.08	28.11	16.729	
2,575.00	2,306.76	2,788.83	2,504.21	14.54	17.16	-118.71	-409.94	-159.43	471.44	442.80	28.63	16.465	
2,600.00	2,315.72	2,821.93	2,520.43	14.77	17.42	-119.05	-410.03	-188.27	473.23	444.13	29.10	16.261	
2,625.00	2,323.45	2,863.72	2,538.63	15.07	17.81	-119.47	-410.14	-225.88	474.91	445.35	29.55	16.069	
2,650.00	2,329.92	2,906.01	2,554.21	15.43	18.26	-119.83	-410.25	-265.18	476.34	446.25	30.09	15.831	
2,675.00	2,335.12	2,948.73	2,566.97	15.83	18.78	-120.13	-410.38	-305.94	477.52	446.81	30.71	15.551	
2,700.00	2,339.04	2,991.80	2,576.72	16.26	19.35	-120.35	-410.50	-347.88	478.42	447.03	31.39	15.241	
2,725.00	2,341.65	3,035.12	2,583.32	16.71	19.97	-120.51	-410.63	-390.68	479.03	446.89	32.14	14.904	
2,750.00	2,342.96	3,078.59	2,586.68	17.17	20.64	-120.58	-410.76	-434.02	479.34	446.39	32.96	14.545	
2,773.68	2,343.00	3,116.95	2,586.92	17.61	21.26	-120.59	-410.88	-472.37	479.38	445.63	33.75	14.203	
2,800.00	2,342.39	3,143.27	2,586.37	18.12	21.70	-120.60	-410.96	-498.68	479.42	444.80	34.62	13.849	
2,900.00	2,340.05	3,243.27	2,584.29	20.13	23.48	-120.62	-411.26	-598.66	479.55	441.54	38.01	12.617	
3,000.00	2,337.72	3,343.27	2,582.21	22.25	25.39	-120.65	-411.56	-698.63	479.68	438.11	41.58	11.537	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood 5 State Com 154H (South Slot3) - 5-154H - Plan 1r1										Offset Site Error:	0.00 usft
Survey Program:		0-MWD										Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
3,100.00	2,335.39	3,443.26	2,580.13	24.43	27.39	-120.68	-411.86	-798.61	479.82	434.55	45.27	10.599	
3,200.00	2,333.06	3,543.26	2,578.05	26.66	29.47	-120.70	-412.16	-898.59	479.95	430.89	49.06	9.783	
3,300.00	2,330.73	3,643.26	2,575.97	28.93	31.61	-120.73	-412.46	-998.57	480.08	427.16	52.92	9.071	
3,400.00	2,328.40	3,743.26	2,573.89	31.23	33.79	-120.75	-412.76	-1,098.55	480.22	423.37	56.85	8.447	
3,500.00	2,326.07	3,843.26	2,571.81	33.55	36.02	-120.78	-413.07	-1,198.52	480.35	419.53	60.82	7.898	
3,600.00	2,323.74	3,943.26	2,569.73	35.89	38.27	-120.80	-413.37	-1,298.50	480.49	415.66	64.83	7.412	
3,700.00	2,321.41	4,043.26	2,567.65	38.24	40.55	-120.83	-413.67	-1,398.48	480.62	411.75	68.87	6.979	
3,800.00	2,319.08	4,143.26	2,565.57	40.60	42.85	-120.85	-413.97	-1,498.46	480.76	407.82	72.94	6.591	
3,900.00	2,316.75	4,243.26	2,563.49	42.98	45.16	-120.88	-414.27	-1,598.43	480.89	403.86	77.03	6.243	
4,000.00	2,314.42	4,343.26	2,561.41	45.36	47.49	-120.90	-414.57	-1,698.41	481.02	399.89	81.13	5.929	
4,100.00	2,312.09	4,443.26	2,559.33	47.75	49.83	-120.93	-414.88	-1,798.39	481.16	395.91	85.25	5.644	
4,200.00	2,309.76	4,543.26	2,557.25	50.15	52.19	-120.95	-415.18	-1,898.37	481.29	391.91	89.39	5.384	
4,300.00	2,307.43	4,643.26	2,555.17	52.56	54.55	-120.98	-415.48	-1,998.34	481.43	387.90	93.53	5.147	
4,400.00	2,305.10	4,743.26	2,553.09	54.96	56.92	-121.00	-415.78	-2,098.32	481.56	383.88	97.69	4.930	
4,500.00	2,302.77	4,843.26	2,551.01	57.37	59.30	-121.03	-416.08	-2,198.30	481.70	379.85	101.85	4.730	
4,600.00	2,300.43	4,943.26	2,548.93	59.79	61.68	-121.05	-416.38	-2,298.28	481.83	375.82	106.02	4.545	
4,700.00	2,298.10	5,043.26	2,546.85	62.21	64.07	-121.08	-416.68	-2,398.25	481.97	371.78	110.19	4.374	
4,800.00	2,295.77	5,143.26	2,544.77	64.63	66.47	-121.10	-416.99	-2,498.23	482.11	367.74	114.37	4.215	
4,900.00	2,293.44	5,243.26	2,542.69	67.05	68.87	-121.13	-417.29	-2,598.21	482.24	363.69	118.55	4.068	
5,000.00	2,291.11	5,343.26	2,540.61	69.48	71.27	-121.15	-417.59	-2,698.19	482.38	359.64	122.74	3.930	
5,100.00	2,288.78	5,443.26	2,538.53	71.91	73.68	-121.18	-417.89	-2,798.16	482.51	355.59	126.93	3.801	
5,200.00	2,286.45	5,543.26	2,536.45	74.34	76.09	-121.20	-418.19	-2,898.14	482.65	351.53	131.12	3.681	
5,300.00	2,284.12	5,643.26	2,534.37	76.77	78.50	-121.23	-418.49	-2,998.12	482.78	347.47	135.31	3.568	
5,400.00	2,281.79	5,743.26	2,532.29	79.20	80.91	-121.25	-418.79	-3,098.10	482.92	343.41	139.51	3.462	
5,500.00	2,279.46	5,843.26	2,530.21	81.64	83.33	-121.28	-419.10	-3,198.07	483.06	339.35	143.70	3.361	
5,600.00	2,277.13	5,943.26	2,528.13	84.07	85.75	-121.30	-419.40	-3,298.05	483.19	335.29	147.90	3.267	
5,700.00	2,274.80	6,043.26	2,526.05	86.51	88.17	-121.33	-419.70	-3,398.03	483.33	331.23	152.10	3.178	
5,800.00	2,272.47	6,143.26	2,523.97	88.95	90.60	-121.35	-420.00	-3,498.01	483.46	327.17	156.30	3.093	
5,900.00	2,270.14	6,243.26	2,521.89	91.39	93.02	-121.38	-420.30	-3,597.99	483.60	323.10	160.50	3.013	
6,000.00	2,267.81	6,343.26	2,519.81	93.83	95.45	-121.40	-420.60	-3,697.96	483.74	319.04	164.70	2.937	
6,100.00	2,265.48	6,443.26	2,517.73	96.27	97.88	-121.43	-420.91	-3,797.94	483.87	314.98	168.90	2.865	
6,200.00	2,263.14	6,543.26	2,515.65	98.71	100.31	-121.45	-421.21	-3,897.92	484.01	310.91	173.10	2.796	
6,300.00	2,260.81	6,643.26	2,513.57	101.15	102.74	-121.48	-421.51	-3,997.90	484.15	306.85	177.30	2.731	
6,400.00	2,258.48	6,743.26	2,511.49	103.59	105.17	-121.50	-421.81	-4,097.87	484.28	302.79	181.50	2.668	
6,500.00	2,256.15	6,843.26	2,509.41	106.03	107.61	-121.53	-422.11	-4,197.85	484.42	298.73	185.70	2.609	
6,600.00	2,253.82	6,943.26	2,507.33	108.48	110.04	-121.55	-422.41	-4,297.83	484.56	294.67	189.89	2.552	
6,700.00	2,251.49	7,043.26	2,505.25	110.92	112.48	-121.58	-422.71	-4,397.81	484.70	290.60	194.09	2.497	
6,800.00	2,249.16	7,143.26	2,503.17	113.37	114.91	-121.60	-423.02	-4,497.78	484.83	286.55	198.29	2.445	
6,900.00	2,246.83	7,243.26	2,501.09	115.81	117.35	-121.63	-423.32	-4,597.76	484.97	282.49	202.48	2.395	
7,000.00	2,244.50	7,343.26	2,499.01	118.26	119.79	-121.65	-423.62	-4,697.74	485.11	278.43	206.68	2.347	
7,100.00	2,242.17	7,443.26	2,496.94	120.70	122.23	-121.68	-423.92	-4,797.72	485.25	274.37	210.87	2.301	
7,200.00	2,239.84	7,543.26	2,494.86	123.15	124.66	-121.70	-424.22	-4,897.69	485.38	270.32	215.07	2.257	
7,300.00	2,237.51	7,643.26	2,492.78	125.60	127.10	-121.73	-424.52	-4,997.67	485.52	266.26	219.26	2.214	
7,400.00	2,235.18	7,743.26	2,490.70	128.04	129.55	-121.75	-424.82	-5,097.65	485.66	262.21	223.45	2.173	
7,500.00	2,232.85	7,843.26	2,488.62	130.49	131.99	-121.78	-425.13	-5,197.63	485.80	258.16	227.64	2.134	
7,600.00	2,230.52	7,943.26	2,486.54	132.94	134.43	-121.80	-425.43	-5,297.60	485.93	254.11	231.83	2.096	
7,700.00	2,228.19	8,043.26	2,484.46	135.39	136.87	-121.83	-425.73	-5,397.58	486.07	250.06	236.01	2.060	
7,800.00	2,225.86	8,143.26	2,482.38	137.84	139.31	-121.85	-426.03	-5,497.56	486.21	246.01	240.20	2.024	
7,800.66	2,225.84	8,143.91	2,482.36	137.85	139.33	-121.85	-426.03	-5,498.22	486.21	245.99	240.22	2.024	
7,879.60	2,224.00	8,209.41	2,481.00	139.15	140.93	-121.87	-426.23	-5,563.70	486.51	243.81	242.70	2.005 SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood 5 State Com 201H (South Slot1) - 5-201H - Plan 1r1										Offset Site Error:	0.00 usft
Survey Program:		0-MWD										Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-1.40	19.99	-0.49	20.00				
100.00	100.00	100.00	100.00	0.31	0.31	-1.40	19.99	-0.49	20.00	19.52	0.47	42.341	
200.00	200.00	200.00	200.00	0.95	0.95	-1.40	19.99	-0.49	20.00	18.49	1.50	13.295	
300.00	300.00	300.00	300.00	1.46	1.46	-1.40	19.99	-0.49	20.00	17.63	2.36	8.457	
400.00	400.00	400.00	400.00	1.89	1.89	-1.40	19.99	-0.49	20.00	16.84	3.15	6.340	
500.00	500.00	500.00	500.00	2.31	2.33	-1.40	19.99	-0.49	20.00	16.07	3.93	5.091 CC, ES	
600.00	599.95	599.21	599.17	3.13	3.24	-93.81	21.76	0.86	21.81	17.05	4.76	4.579	
700.00	699.63	698.07	697.76	4.80	4.84	-99.50	27.59	5.30	28.00	21.99	6.01	4.658	
800.00	798.77	796.36	795.26	6.09	6.11	-104.48	37.39	12.77	38.79	31.62	7.17	5.413	
900.00	897.08	893.78	891.14	7.16	7.16	-107.83	51.04	23.16	54.16	45.88	8.28	6.543	
1,000.00	994.31	990.06	984.92	8.10	8.07	-109.87	68.33	36.33	73.99	64.63	9.36	7.902	
1,040.00	1,032.83	1,028.20	1,021.75	8.22	8.40	-110.42	76.21	42.34	83.14	73.43	9.71	8.566	
1,100.00	1,090.45	1,085.05	1,076.27	8.33	8.87	-110.95	89.05	52.12	97.81	87.61	10.20	9.594	
1,200.00	1,186.48	1,178.82	1,165.05	8.52	9.60	-109.99	113.02	70.38	124.14	113.08	11.06	11.224	
1,300.00	1,282.51	1,273.01	1,252.87	8.73	9.91	-108.01	140.09	91.00	152.61	140.68	11.93	12.793	
1,400.00	1,378.54	1,368.65	1,341.86	8.95	10.09	-106.48	167.97	112.24	181.49	168.66	12.83	14.142	
1,500.00	1,474.57	1,464.29	1,430.85	9.18	10.29	-105.37	195.86	133.48	210.46	196.70	13.77	15.288	
1,550.56	1,523.12	1,512.65	1,475.84	9.30	10.39	-104.92	209.95	144.22	225.13	210.90	14.23	15.819	
1,600.00	1,571.13	1,559.97	1,519.87	9.52	10.50	-105.20	223.75	154.73	238.95	224.25	14.70	16.256	
1,650.00	1,620.54	1,607.67	1,564.25	10.03	10.61	-104.19	237.66	165.33	251.93	236.76	15.17	16.611	
1,700.00	1,670.41	1,654.84	1,608.14	10.53	10.73	-98.14	251.41	175.80	264.13	248.55	15.59	16.946	
1,750.00	1,720.38	1,701.13	1,651.20	10.63	10.84	75.72	264.90	186.08	275.95	259.41	16.54	16.679	
1,800.00	1,770.07	1,746.18	1,693.12	11.04	10.96	79.18	278.04	196.09	287.86	270.17	17.69	16.277	
1,850.00	1,819.10	1,789.65	1,733.56	11.47	11.07	82.06	290.71	205.74	300.39	282.36	18.03	16.658	
1,900.00	1,867.08	1,831.20	1,772.23	11.87	11.18	84.84	302.83	214.97	314.10	295.73	18.37	17.099	
1,950.00	1,913.67	1,870.54	1,808.82	12.24	11.29	87.44	314.29	223.71	329.52	310.81	18.71	17.608	
2,000.00	1,958.50	1,907.34	1,843.07	12.58	11.40	89.72	325.02	231.88	347.14	328.05	19.09	18.183	
2,050.00	2,001.24	1,941.34	1,874.70	12.88	11.49	91.54	334.93	239.43	367.30	347.79	19.52	18.821	
2,100.00	2,041.55	1,972.27	1,903.48	13.15	11.58	92.77	343.95	246.30	390.24	370.25	19.99	19.522	
2,150.00	2,079.13	1,999.91	1,929.19	13.39	11.67	93.28	352.01	252.44	416.05	395.54	20.51	20.286	
2,200.00	2,113.70	2,024.03	1,951.64	13.59	11.74	92.97	359.04	257.80	444.68	423.63	21.05	21.122	
2,250.00	2,144.99	2,044.46	1,970.64	13.76	11.80	91.75	365.00	262.34	475.98	454.38	21.60	22.033	
2,300.00	2,172.76	2,061.03	1,986.07	13.90	11.85	89.52	369.83	266.02	509.69	487.54	22.14	23.018	
2,312.55	2,179.16	2,064.62	1,989.40	13.92	11.86	88.81	370.87	266.81	518.49	496.22	22.27	23.277	
2,400.00	2,222.88	2,188.73	2,107.41	14.00	12.71	104.23	405.64	281.26	581.01	556.57	24.44	23.777	
2,500.00	2,272.88	2,809.05	2,610.49	14.17	15.71	128.34	496.09	-14.36	628.47	605.66	22.80	27.559	
2,512.55	2,279.16	2,821.60	2,616.76	14.21	15.76	128.34	496.06	-25.23	628.47	605.44	23.02	27.296	
2,525.00	2,285.24	2,834.05	2,622.99	14.25	15.82	128.34	496.03	-36.00	628.57	605.32	23.24	27.043	
2,550.00	2,296.59	2,859.01	2,635.47	14.37	15.95	128.36	495.96	-57.62	629.38	605.69	23.69	26.565	
2,575.00	2,306.76	2,883.87	2,647.90	14.54	16.08	128.39	495.90	-79.15	631.00	606.86	24.14	26.134	
2,600.00	2,315.72	2,908.56	2,660.24	14.77	16.24	128.43	495.84	-100.53	633.45	608.84	24.61	25.743	
2,625.00	2,323.45	2,933.01	2,672.47	15.07	16.41	128.48	495.77	-121.71	636.73	611.64	25.09	25.382	
2,650.00	2,329.92	2,957.16	2,684.54	15.43	16.59	128.54	495.71	-142.62	640.84	615.29	25.55	25.079	
2,675.00	2,335.12	2,980.93	2,696.43	15.83	16.78	128.58	495.65	-163.21	645.80	619.79	26.00	24.834	
2,700.00	2,339.04	3,004.27	2,708.10	16.26	16.97	128.62	495.59	-183.42	651.62	625.18	26.44	24.646	
2,725.00	2,341.65	3,091.79	2,746.23	16.71	17.88	130.15	495.36	-262.10	657.30	630.63	26.67	24.646	
2,750.00	2,342.96	3,194.94	2,775.19	17.17	19.24	131.38	495.07	-360.95	661.14	633.75	27.39	24.134	
2,773.68	2,343.00	3,297.95	2,785.98	17.61	20.85	131.93	494.76	-463.26	662.79	634.23	28.56	23.209	
2,800.00	2,342.39	3,336.64	2,785.71	18.12	21.51	131.97	494.65	-501.94	663.01	633.60	29.41	22.545	
2,900.00	2,340.05	3,436.63	2,784.44	20.13	23.30	132.03	494.36	-601.93	663.71	631.32	32.39	20.488	
3,000.00	2,337.72	3,536.62	2,783.17	22.25	25.20	132.10	494.06	-701.91	664.42	628.91	35.52	18.707	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood 5 State Com 201H (South Slot1) - 5-201H - Plan 1r1											Offset Site Error:		0.00 usft
Survey Program:		0-MWD											Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
3,100.00	2,335.39	3,636.62	2,781.89	24.43	27.20	132.17	493.77	-801.90	665.13	626.38	38.75	17.165			
3,200.00	2,333.06	3,736.61	2,780.62	26.66	29.27	132.24	493.48	-901.88	665.84	623.78	42.06	15.830			
3,300.00	2,330.73	3,836.61	2,779.35	28.93	31.40	132.30	493.18	-1,001.87	666.56	621.12	45.44	14.670			
3,400.00	2,328.40	3,936.60	2,778.07	31.23	33.57	132.37	492.89	-1,101.86	667.27	618.41	48.86	13.657			
3,500.00	2,326.07	4,036.60	2,776.80	33.55	35.78	132.44	492.59	-1,201.84	667.98	615.66	52.32	12.768			
3,600.00	2,323.74	4,136.59	2,775.53	35.89	38.02	132.51	492.30	-1,301.83	668.70	612.89	55.81	11.982			
3,700.00	2,321.41	4,236.59	2,774.26	38.24	40.28	132.57	492.01	-1,401.81	669.41	610.10	59.32	11.285			
3,800.00	2,319.08	4,336.58	2,772.98	40.60	42.57	132.64	491.71	-1,501.80	670.13	607.29	62.85	10.663			
3,900.00	2,316.75	4,436.57	2,771.71	42.98	44.88	132.70	491.42	-1,601.79	670.85	604.46	66.39	10.105			
4,000.00	2,314.42	4,536.57	2,770.44	45.36	47.20	132.77	491.13	-1,701.77	671.57	601.63	69.94	9.602			
4,100.00	2,312.09	4,636.56	2,769.16	47.75	49.53	132.84	490.83	-1,801.76	672.29	598.79	73.50	9.147			
4,200.00	2,309.76	4,736.56	2,767.89	50.15	51.88	132.90	490.54	-1,901.74	673.01	595.94	77.07	8.733			
4,300.00	2,307.43	4,836.55	2,766.62	52.56	54.23	132.97	490.24	-2,001.73	673.73	593.09	80.64	8.355			
4,400.00	2,305.10	4,936.55	2,765.34	54.96	56.60	133.03	489.95	-2,101.72	674.45	590.24	84.21	8.009			
4,500.00	2,302.77	5,036.54	2,764.07	57.37	58.97	133.10	489.66	-2,201.70	675.17	587.39	87.78	7.691			
4,600.00	2,300.43	5,136.53	2,762.80	59.79	61.35	133.17	489.36	-2,301.69	675.90	584.54	91.36	7.398			
4,700.00	2,298.10	5,236.53	2,761.52	62.21	63.73	133.23	489.07	-2,401.67	676.62	581.69	94.93	7.127			
4,800.00	2,295.77	5,336.52	2,760.25	64.63	66.12	133.30	488.78	-2,501.66	677.35	578.84	98.51	6.876			
4,900.00	2,293.44	5,436.52	2,758.98	67.05	68.51	133.36	488.48	-2,601.64	678.07	575.99	102.08	6.642			
5,000.00	2,291.11	5,536.51	2,757.70	69.48	70.91	133.43	488.19	-2,701.63	678.80	573.15	105.65	6.425			
5,100.00	2,288.78	5,636.51	2,756.43	71.91	73.31	133.49	487.89	-2,801.62	679.53	570.30	109.22	6.221			
5,200.00	2,286.45	5,736.50	2,755.16	74.34	75.72	133.56	487.60	-2,901.60	680.26	567.47	112.79	6.031			
5,300.00	2,284.12	5,836.50	2,753.89	76.77	78.13	133.62	487.31	-3,001.59	680.99	564.63	116.35	5.853			
5,400.00	2,281.79	5,936.49	2,752.61	79.20	80.54	133.68	487.01	-3,101.57	681.72	561.80	119.91	5.685			
5,500.00	2,279.46	6,036.48	2,751.34	81.64	82.96	133.75	486.72	-3,201.56	682.45	558.98	123.47	5.527			
5,600.00	2,277.13	6,136.48	2,750.07	84.07	85.37	133.81	486.43	-3,301.55	683.18	556.16	127.02	5.379			
5,700.00	2,274.80	6,236.47	2,748.79	86.51	87.79	133.88	486.13	-3,401.53	683.91	553.35	130.57	5.238			
5,800.00	2,272.47	6,336.47	2,747.52	88.95	90.21	133.94	485.84	-3,501.52	684.65	550.54	134.11	5.105			
5,900.00	2,270.14	6,436.46	2,746.25	91.39	92.63	134.00	485.54	-3,601.50	685.38	547.73	137.65	4.979			
6,000.00	2,267.81	6,536.46	2,744.97	93.83	95.06	134.07	485.25	-3,701.49	686.12	544.93	141.19	4.860			
6,100.00	2,265.48	6,636.45	2,743.70	96.27	97.49	134.13	484.96	-3,801.48	686.85	542.14	144.72	4.746			
6,200.00	2,263.14	6,736.45	2,742.43	98.71	99.91	134.19	484.66	-3,901.46	687.59	539.35	148.24	4.638			
6,300.00	2,260.81	6,836.44	2,741.15	101.15	102.34	134.26	484.37	-4,001.45	688.33	536.57	151.76	4.536			
6,400.00	2,258.48	6,936.43	2,739.88	103.59	104.77	134.32	484.08	-4,101.43	689.07	533.79	155.28	4.438			
6,500.00	2,256.15	7,036.43	2,738.61	106.03	107.20	134.38	483.78	-4,201.42	689.81	531.02	158.79	4.344			
6,600.00	2,253.82	7,136.42	2,737.33	108.48	109.64	134.44	483.49	-4,301.40	690.55	528.26	162.30	4.255			
6,700.00	2,251.49	7,236.42	2,736.06	110.92	112.07	134.51	483.19	-4,401.39	691.29	525.50	165.80	4.170			
6,800.00	2,249.16	7,336.41	2,734.79	113.37	114.50	134.57	482.90	-4,501.38	692.03	522.74	169.29	4.088			
6,900.00	2,246.83	7,436.41	2,733.51	115.81	116.94	134.63	482.61	-4,601.36	692.78	520.00	172.78	4.010			
7,000.00	2,244.50	7,536.40	2,732.24	118.26	119.38	134.69	482.31	-4,701.35	693.52	517.26	176.26	3.935			
7,100.00	2,242.17	7,636.40	2,730.97	120.70	121.81	134.76	482.02	-4,801.33	694.27	514.52	179.74	3.863			
7,200.00	2,239.84	7,736.39	2,729.70	123.15	124.25	134.82	481.73	-4,901.32	695.01	511.79	183.22	3.793			
7,300.00	2,237.51	7,836.38	2,728.42	125.60	126.69	134.88	481.43	-5,001.31	695.76	509.07	186.69	3.727			
7,400.00	2,235.18	7,936.38	2,727.15	128.04	129.13	134.94	481.14	-5,101.29	696.51	506.36	190.15	3.663			
7,500.00	2,232.85	8,036.37	2,725.88	130.49	131.57	135.00	480.84	-5,201.28	697.25	503.65	193.61	3.601			
7,600.00	2,230.52	8,136.37	2,724.60	132.94	134.01	135.06	480.55	-5,301.26	698.00	500.95	197.06	3.542			
7,700.00	2,228.19	8,236.36	2,723.33	135.39	136.45	135.13	480.26	-5,401.25	698.75	498.25	200.50	3.485			
7,800.00	2,225.86	8,336.36	2,722.06	137.84	138.89	135.19	479.96	-5,501.23	699.50	495.56	203.94	3.430			
7,879.60	2,224.00	8,415.96	2,721.04	139.15	140.84	135.23	479.73	-5,580.83	700.10	493.91	206.19	3.395 SF			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood BD State 1 (Offset) PA - GW BD ST 1 - GW BD ST 1 AsDrille													Offset Site Error:	0.00 usft
Survey Program: 500-DIPMETER													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.00	2,295.77	2,324.82	2,295.77	64.63	62.88	-91.87	-544.75	-3,245.77	925.71	824.30	101.40	9.129		
4,900.00	2,293.44	2,322.49	2,293.44	67.05	62.78	-91.62	-544.75	-3,245.77	846.38	739.92	106.46	7.950		
5,000.00	2,291.11	2,320.16	2,291.11	69.48	62.67	-91.37	-544.75	-3,245.77	771.86	659.80	112.06	6.888		
5,100.00	2,288.78	2,317.83	2,288.78	71.91	62.56	-91.12	-544.75	-3,245.77	703.68	585.66	118.02	5.962		
5,200.00	2,286.45	2,315.50	2,286.45	74.34	62.45	-90.88	-544.75	-3,245.77	643.86	519.94	123.92	5.196		
5,300.00	2,284.12	2,313.16	2,284.12	76.77	62.34	-90.63	-544.75	-3,245.77	594.93	465.93	129.00	4.612		
5,400.00	2,281.79	2,310.83	2,281.79	79.20	62.23	-90.38	-544.75	-3,245.77	559.74	427.59	132.15	4.236		
5,500.00	2,279.46	2,308.50	2,279.46	81.64	62.12	-90.13	-544.75	-3,245.77	540.98	408.75	132.23	4.091 SF		
5,553.27	2,278.22	2,307.26	2,278.22	82.93	62.06	-90.00	-544.75	-3,245.77	538.36	407.54	130.81	4.115 CC, ES		
5,600.00	2,277.13	2,306.17	2,277.13	84.07	62.01	-89.88	-544.75	-3,245.77	540.38	411.63	128.75	4.197		
5,700.00	2,274.80	2,303.84	2,274.80	86.51	61.90	-89.64	-544.75	-3,245.77	557.98	435.65	122.33	4.561		
5,800.00	2,272.47	2,301.51	2,272.47	88.95	61.80	-89.39	-544.75	-3,245.77	592.17	477.64	114.53	5.170		
5,900.00	2,270.14	2,299.18	2,270.14	91.39	61.69	-89.14	-544.75	-3,245.77	640.30	533.33	106.97	5.986		
6,000.00	2,267.81	2,296.85	2,267.81	93.83	61.58	-88.89	-544.75	-3,245.77	699.49	598.86	100.63	6.951		
6,100.00	2,265.48	2,294.52	2,265.48	96.27	61.47	-88.64	-544.75	-3,245.77	767.19	671.48	95.71	8.016		
6,200.00	2,263.14	2,292.19	2,263.14	98.71	61.36	-88.40	-544.75	-3,245.77	841.35	749.38	91.97	9.148		
6,300.00	2,260.81	2,289.86	2,260.81	101.15	61.25	-88.15	-544.75	-3,245.77	920.40	831.31	89.08	10.332		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood BD State 10 (Offset) Active - GW BD ST 10 - GW BD ST 10 A										Offset Site Error:	0.00 usft
Survey Program:		410-INC-ONLY										Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.00	2,286.45	2,315.52	2,286.45	74.34	60.90	90.82	820.07	-3,403.55	969.94	865.37	104.57	9.275	
5,300.00	2,284.12	2,313.19	2,284.12	76.77	60.84	90.66	820.07	-3,403.55	921.64	810.49	111.14	8.292	
5,400.00	2,281.79	2,310.86	2,281.79	79.20	60.79	90.50	820.07	-3,403.55	882.07	763.98	118.09	7.470	
5,500.00	2,279.46	2,308.53	2,279.46	81.64	60.74	90.33	820.07	-3,403.55	852.44	727.39	125.06	6.816	
5,600.00	2,277.13	2,306.20	2,277.13	84.07	60.69	90.17	820.07	-3,403.55	833.82	702.22	131.60	6.336	
5,700.00	2,274.80	2,303.87	2,274.80	86.51	60.64	90.01	820.07	-3,403.55	826.95	689.72	137.23	6.026	
5,707.07	2,274.63	2,303.70	2,274.63	86.68	60.63	90.00	820.07	-3,403.55	826.92	689.34	137.58	6.010 CC, ES	
5,800.00	2,272.47	2,301.54	2,272.47	88.95	60.59	89.85	820.07	-3,403.55	832.13	690.58	141.55	5.879 SF	
5,900.00	2,270.14	2,299.21	2,270.14	91.39	60.54	89.69	820.07	-3,403.55	849.12	704.79	144.33	5.883	
6,000.00	2,267.81	2,296.88	2,267.81	93.83	60.48	89.53	820.07	-3,403.55	877.25	731.67	145.58	6.026	
6,100.00	2,265.48	2,294.54	2,265.48	96.27	60.43	89.37	820.07	-3,403.55	915.49	770.00	145.49	6.293	
6,200.00	2,263.14	2,292.21	2,263.14	98.71	60.38	89.20	820.07	-3,403.55	962.63	818.30	144.33	6.669	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW BD ST 8 AsDrille													Offset Site Error:	0.00 usft
Survey Program: 360-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
6,100.00	2,265.48	2,294.64	2,265.48	96.27	108.67	-92.51	-477.60	-4,670.34	994.28	842.48	151.80	6.550		
6,200.00	2,263.14	2,292.31	2,263.14	98.71	108.50	-92.22	-477.60	-4,670.34	907.24	749.07	158.17	5.736		
6,300.00	2,260.81	2,289.98	2,260.81	101.15	108.33	-91.94	-477.60	-4,670.34	823.14	657.67	165.47	4.975		
6,400.00	2,258.48	2,287.65	2,258.48	103.59	108.16	-91.65	-477.60	-4,670.34	742.98	569.26	173.72	4.277		
6,500.00	2,256.15	2,285.32	2,256.15	106.03	107.99	-91.37	-477.60	-4,670.34	668.19	485.43	182.76	3.656		
6,600.00	2,253.82	2,282.99	2,253.82	108.48	107.82	-91.08	-477.60	-4,670.34	600.76	408.69	192.07	3.128		
6,700.00	2,251.49	2,280.65	2,251.49	110.92	107.65	-90.79	-477.60	-4,670.34	543.46	343.01	200.45	2.711		
6,800.00	2,249.16	2,278.32	2,249.16	113.37	107.48	-90.51	-477.60	-4,670.34	499.77	293.98	205.79	2.429		
6,900.00	2,246.83	2,275.99	2,246.83	115.81	107.31	-90.22	-477.60	-4,670.34	473.48	268.07	205.41	2.305 SF		
6,978.02	2,245.01	2,274.18	2,245.01	117.72	107.18	-90.00	-477.60	-4,670.34	467.01	267.03	199.98	2.335 CC, ES		
7,000.00	2,244.50	2,273.66	2,244.50	118.26	107.14	-89.94	-477.60	-4,670.34	467.52	269.88	197.64	2.366		
7,100.00	2,242.17	2,271.33	2,242.17	120.70	106.97	-89.65	-477.60	-4,670.34	482.67	299.01	183.66	2.628		
7,200.00	2,239.84	2,269.00	2,239.84	123.15	106.80	-89.37	-477.60	-4,670.34	517.05	349.73	167.33	3.090		
7,300.00	2,237.51	2,266.67	2,237.51	125.60	106.63	-89.08	-477.60	-4,670.34	567.20	414.57	152.62	3.716		
7,400.00	2,235.18	2,264.34	2,235.18	128.04	106.46	-88.79	-477.60	-4,670.34	629.34	487.84	141.50	4.448		
7,500.00	2,232.85	2,262.01	2,232.85	130.49	106.29	-88.51	-477.60	-4,670.34	700.29	566.53	133.76	5.235		
7,600.00	2,230.52	2,259.68	2,230.52	132.94	106.12	-88.22	-477.60	-4,670.34	777.65	649.23	128.42	6.056		
7,700.00	2,228.19	2,257.35	2,228.19	135.39	105.95	-87.94	-477.60	-4,670.34	859.69	735.12	124.57	6.901		
7,800.00	2,225.86	2,255.02	2,225.86	137.84	105.78	-87.65	-477.60	-4,670.34	945.19	823.53	121.66	7.769		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Offset Design		Greasewood 5 State Com - Greasewood BD State 9 (Offset) PA - GW BD ST 9 - GW BD ST 9 AsDrille										Offset Site Error:	0.00 usft
Survey Program:		377-INC-ONLY										Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,500.00	2,256.15	2,288.21	2,258.94	106.03	62.07	90.98	844.85	-4,702.52	994.06	856.48	137.58	7.226	
6,600.00	2,253.82	2,285.81	2,256.54	108.48	62.02	90.82	844.86	-4,702.52	947.08	801.93	145.15	6.525	
6,700.00	2,251.49	2,283.41	2,254.14	110.92	61.96	90.66	844.87	-4,702.52	908.71	755.91	152.80	5.947	
6,800.00	2,249.16	2,281.01	2,251.75	113.37	61.90	90.49	844.87	-4,702.52	880.07	719.95	160.12	5.496	
6,900.00	2,246.83	2,278.62	2,249.35	115.81	61.85	90.33	844.88	-4,702.52	862.14	695.49	166.65	5.173	
7,000.00	2,244.50	2,276.22	2,246.95	118.26	61.79	90.17	844.89	-4,702.52	855.60	683.69	171.90	4.977	
7,006.26	2,244.35	2,276.07	2,246.80	118.41	61.79	90.16	844.89	-4,702.52	855.57	683.39	172.18	4.969	CC, ES
7,100.00	2,242.17	2,273.82	2,244.55	120.70	61.74	90.01	844.89	-4,702.52	860.69	685.16	175.53	4.903	SF
7,200.00	2,239.84	2,271.42	2,242.15	123.15	61.68	89.85	844.90	-4,702.52	877.22	699.85	177.38	4.946	
7,300.00	2,237.51	2,269.02	2,239.75	125.60	61.62	89.69	844.91	-4,702.52	904.57	727.06	177.51	5.096	
7,400.00	2,235.18	2,266.62	2,237.35	128.04	61.57	89.53	844.91	-4,702.52	941.78	765.60	176.18	5.346	
7,500.00	2,232.85	2,264.22	2,234.95	130.49	61.51	89.37	844.92	-4,702.52	987.75	814.03	173.72	5.686	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to 3566+20 @ 3586.00usft (planning)

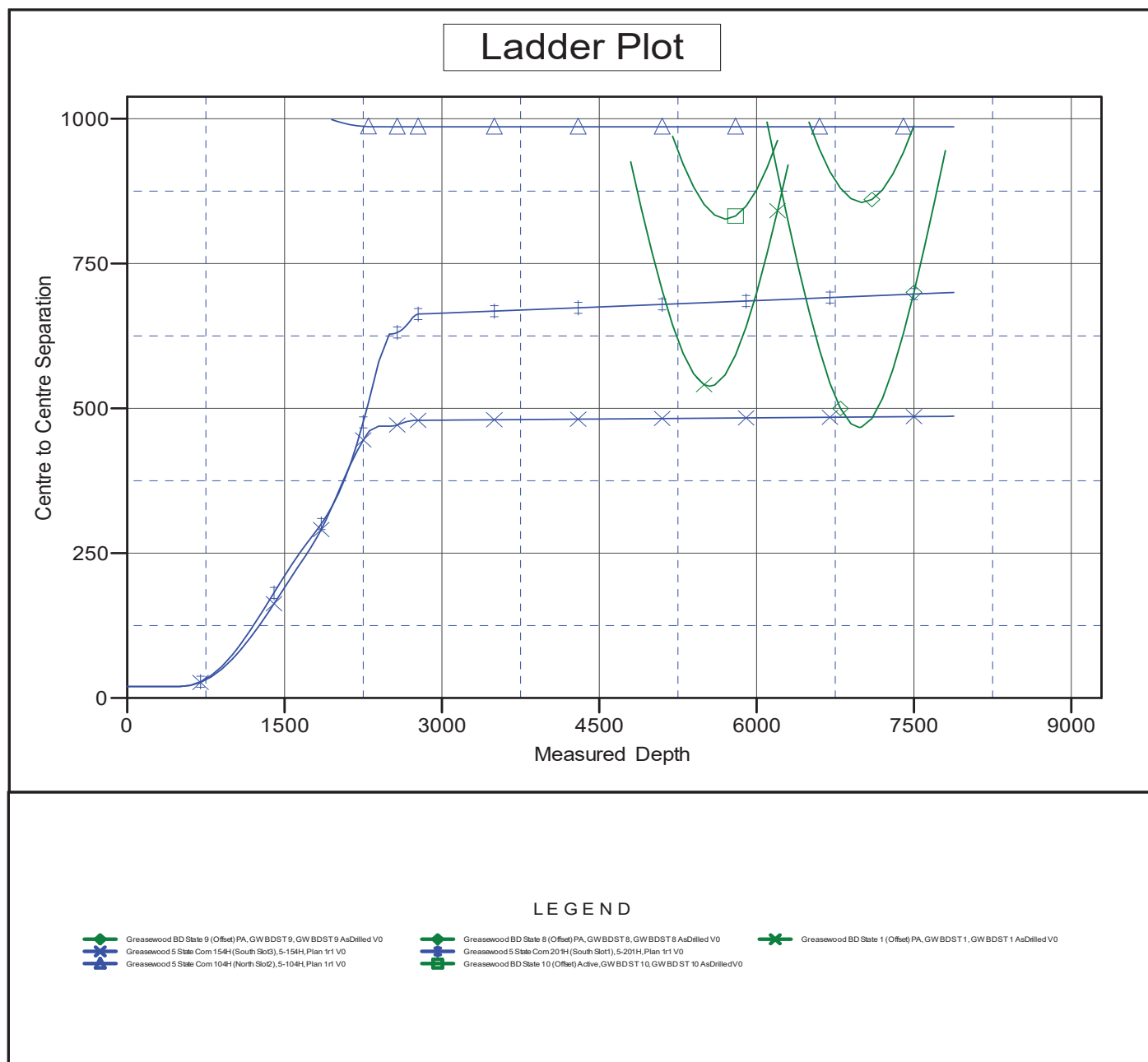
Offset Depths are relative to Offset Datum

Central Meridian is -104.3333333

Coordinates are relative to: Greasewood 5 State Com 105H (South Slot2)

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: -0.09°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	Local Co-ordinate Reference:	Well Greasewood 5 State Com 105H (South Slot2)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	TVD Reference:	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	MD Reference:	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Greasewood 5 State Com 105H (South Slot2)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	5-105H	Database:	PRIME_EDM
Reference Design:	Plan 1r1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to 3566+20 @ 3586.00usft (planning)

Offset Depths are relative to Offset Datum

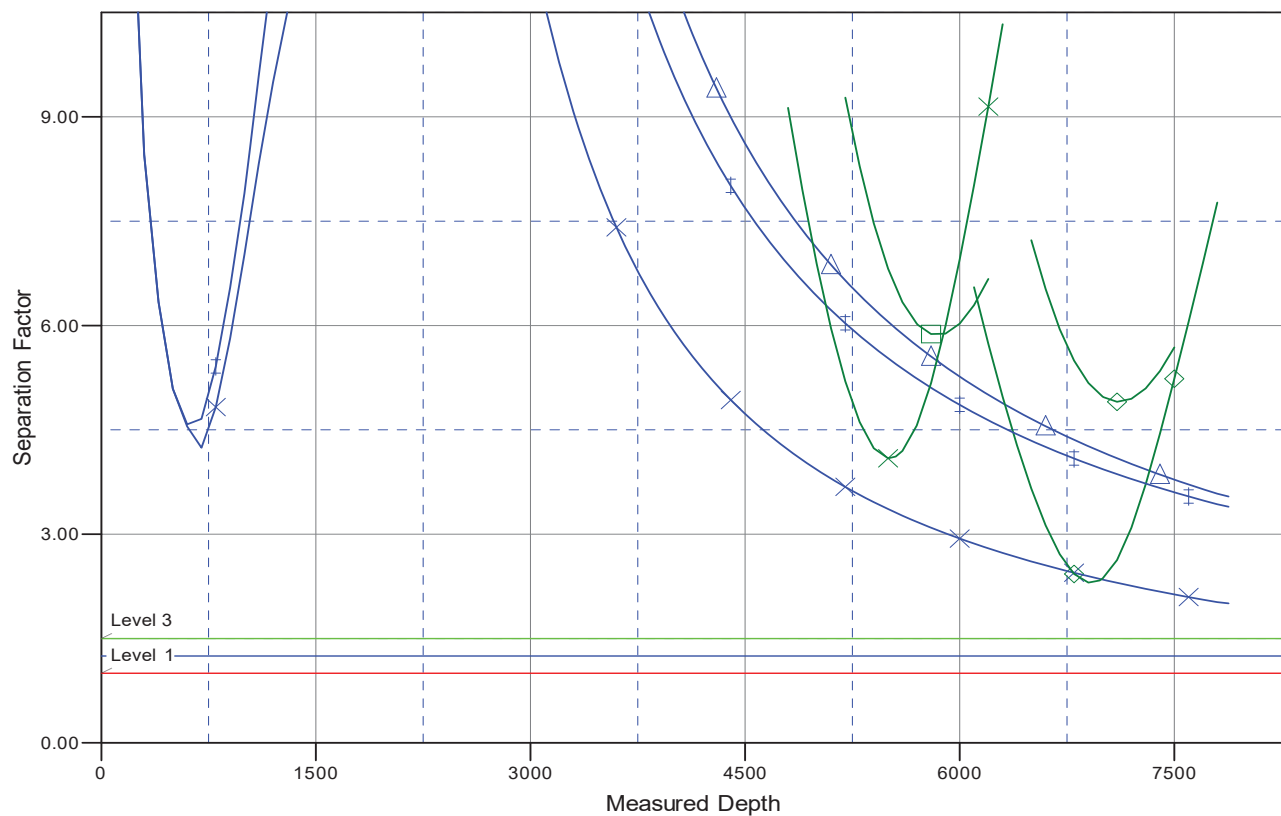
Central Meridian is -104.333333

Coordinates are relative to: Greasewood 5 State Com 105H (South Slot2)

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: -0.09°

Separation Factor Plot



LEGEND

- Greasewood BD State 9 (Offset) PA, GW BDST9, GW BDST9 AsDrilled V0
- Greasewood BD State 8 (Offset) PA, GW BDST8, GW BDST8 AsDrilled V0
- Greasewood BD State 1 (Offset) PA, GW BDST1, GW BDST1 AsDrilled V0
- Greasewood 5 State Com 154H (South Slot3), 5-154H, Plan 1r1 V0
- Greasewood 5 State Com 201H (South Slot1), 5-201H, Plan 1r1 V0
- Greasewood BD State 10 (Offset) Active, GW BDST10, GW BDST10 AsDrilled V0
- Greasewood 5 State Com 104H (North Slot2), 5-104H, Plan 1r1 V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Silverback Operating II, LLC **OGRID:** 330968 **Date:** 08 / 25 / 2023

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
See attached table						

IV. Central Delivery Point Name: GREASEWOOD 5 STATE COM CDP [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
See attached table						

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: *Fatma Abdallah*

Printed Name: Fatma Abdallah

Title: Regulatory Manager

E-mail Address: fabdallah@silverbackexp.com

Date: 08/25/2023

Phone: 210-585-3316

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:

Title:

Approval Date:

Conditions of Approval:

III. Wells

<u>Well Name</u>	<u>API</u>	<u>ULSTR</u>	<u>Footages</u>	<u>Anticipated Oil BBL/D</u>	<u>Anticipated Gas MCF/D</u>	<u>Anticipated Produced Water BBL/D</u>
GREASEWOOD 5 STATE COM 153H	30-15-53756	D-4-19S-25E	670' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 201H	30-15-53757	E-4-19S-25E	1809' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 154H	30-15-53758	E-4-19S-25E	1849' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 104H	30-15-53794	D-4-19S-25E	690' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 105H	30-15-53755	E-4-19S-25E	1829' N 370' E	515	800	3000

V. Anticipated Schedule

<u>Well Name</u>	<u>API</u>	<u>Spud date</u>	<u>TD Reached Date</u>	<u>Completion Commencement Date</u>	<u>Initial Flow Back Date</u>	<u>First Production Date</u>
GREASEWOOD 5 STATE COM 153H	30-15-53756	2/29/24	3/10/24	4/25/24	5/30/24	5/30/24
GREASEWOOD 5 STATE COM 104H	30-15-53794	3/11/24	3/21/24	4/25/24	5/30/24	5/30/24
GREASEWOOD 5 STATE COM 201H	30-15-53757	3/23/24	4/1/24	5/4/24	6/1/24	6/1/24
GREASEWOOD 5 STATE COM 105H	30-15-53755	4/2/24	4/12/24	5/4/24	6/1/24	6/1/24
GREASEWOOD 5 STATE COM 154H	30-15-53758	4/13/24	4/23/24	5/4/24	6/1/24	6/1/24

Separation Equipment

Silverback Operating II (LLC) has sampled existing producing wells and performed laboratory testing to determine composition. Performance of existing producing wells was analyzed to predict expected production volumes including a low probably, high volume production case (approximately 75% higher than type curve or most likely amount of production). Production composition and the volumes were utilized as inputs to a process model which predicts relative amounts of gas, oil and water throughout the process. The high volume case was used to size equipment, piping and instrumentation. Equipment sizing is based on drop settlement and limits the amount of carry over to the gas phase.

Each well has a dedicated 3 phase separator and gas from that separator is taken directly to gas sales. Facility piping and pipeline were sized to allow peak volumes to flow with minimal pressure loss and deliver to midstream gatherer at an acceptable pressure. Water is conveyed directly to tankage.

Oil from 3 phase separators is comingled and conveyed to a heated separator for enhanced liquid-liquid separation and degassing. Vapors from the heater treater are routed to a Vapor Recovery Unit (VRU).

Oil and water storage tanks vapor outlets are common and utilize a closed vent vapor system to ensure all working & breathing and flashing losses are routed to the Vapor Recovery Unit (VRU). Site VRUs are sized to accommodate peak expected production volume. Flash volumes were estimated using the high volume case and process modeling software. Gas from the VRU outlet is combined with 1st stage separation gas and sent to sales.

Venting and Flaring

Silverback Operating II, LLC will ensure pipeline connectivity before producing hydrocarbons and will operate a closed vent vapor capture system that is designed to capture all associated and evolved gas during normal operation. Venting or flaring will only occur during start up and shut down, maintenance activities or equipment failure or upset. Silverback may utilize the following from list A-I of Section 3 for its operations to minimize flaring:

- a) Power generation on lease – Natural gas driven gen set to produce power required to run supply well pad electrical loads
- c) Compression on lease – gas lift or gas compression as required
- d) Liquids removal on lease – gas pressure will be used to convey fluids as needed

Best Management Practices

Silverback utilizes automate engineering controls included in facility design to minimize venting and flaring. Additionally, operational best practices support minimization of flare and venting as described below.

If the main gas outlet becomes unavailable and pressure increases on the outlet sales line, produced gas will be routed directly to the facility flare. The facility control system will alert personnel to the need for maintenance and appropriate response to the temporary flaring event.

The facility design includes a closed vent vapor capture system to route flash or evolved from the heater treater and tanks to the Vapor Recovery Unit (VRU) Compressor. If the VRU requires planned or unplanned maintenance, vapors will automatically be routed to the facility flare.

For maintenance activities, Silverback will utilize the facility flare to blowdown equipment and piping whenever practical to minimize venting

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 257941

CONDITIONS

Operator: Silverback Operating II, LLC 19707 IH10 West, Suite 201 San Antonio, TX 78256	OGRID: 330968
	Action Number: 257941
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Original COA's still apply.	9/29/2023